COURSES OF STUDIES

FOR

THREE YEAR DEGREE COURSE

IN

ARTS HONOURS

DEPARTMENT OF ECONOMICS

Choice Based Credit System(CBCS)

First & Second Semester Examination – 2021-22

Third & Fourth Semester Examination – 2022-23

Fifth & Sixth Semester Examination – 2023-24

GOVERNMENT AUTONOMOUS COLLEGE, PHULBANI, KANDHAMAL

DISTRIBUTION OF MARKS

Paper with Practical	
Mid Sem (15 Marks)	
Two questions to be answered carrying 1 mark each	2X1 mark = 2 marks
Two questions to be answered carrying 1.5 marks each	2X1.5 marks = 3 marks
Two questions to be answered carrying 2 marks each	2X2 marks = 4 marks
One question to be answered carrying 6 marks each	1X6 marks = 6 marks
End Sem (60 Marks)	
Eight questions to be answered carrying 1 mark each	8X1 mark = 8 marks
Eight questions to be answered carrying 1.5 marks each	8X1.5 marks = 12 marks
Eight questions to be answered carrying 2 marks each	8X2 marks = 16 marks
Four questions to be answered carrying 6 marks each	4X6 marks = 24 marks

Paper without Practical	
Mid Sem (20 Marks)	
Three questions to be answered carrying 1 mark each	3X1 mark = 3 marks
Two questions to be answered carrying 2 marks each	2X2 marks = 4 marks
Two questions to be answered carrying 3 marks each	2X3 marks = 6 marks
One question to be answered carrying 7 marks each	1X7 marks = 7 marks
End Sem (80 Marks)	
Twelve questions to be answered carrying 1 mark each	12X1 mark = 12 marks
Eight questions to be answered carrying 2 marks each	8X2 marks = 16 marks
Eight questions to be answered carrying 3 marks each	8X3 marks = 24 marks
Four questions to be answered carrying 7 marks each	4X7 marks = 28 marks

SYLLABI FOR CBCS COURSE

Sem	CORE COURESE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Ability Enhancement Elective Course (AEEC) (2) (Skill Based)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CORE-I	AECC-I AECC-III(EV-I)			GE-IA
	CORE-II				
II	CORE-III	AECC-II AECC-III(EV-II)			GE-1B
	CORE -IV				
III	CORE-V	AECC-III(EV-III)	SEC-I		GE-2A
	CORE-VI				
	CORE-VII				
IV	CORE-VIII	AECC-III(EV-IV)	SEC-II		GE-2B
	CORE-IX				
	CORE-X				
V	CORE-XI	AECC-III(EV-V)		DSE-I	
	CORE-XII			DSE-II	
VI	CORE-XIII	AECC-III(EV-VI)		DSE-III	
	CORE-XIV			DSE-IV / Project	

YEAR & SEMESTER-WISE PAPERS & CREDITS AT A GLANCE

Yr.	Sl.No.	Course Structure	Code	Credit Points
		Three-Year (6-Semester) CBCS Programme (B.A. Hons) (Economics Department)		
		SEMESTER-I		
FIRST YEAR	1	Introductory Microeconomics	C-1.1	6
	2	Mathematical Methods for Economics – I	C-1.2	6
	3	Micro Economics (For Commerce Stream)	GE-1.3	6
	4			
	5	Ethics & Values (Unit-I)	AECC-1.5	1
		SEMESTER-II		
	6	Introductory Macroeconomics	C-2.1	6
	7	Mathematical Methods for Economics – II	C-2.2	6
	8	Macro & Indian Economy (For Commerce Stream)	GE-2.3	6
	9	Indian Economy – II	GE-2.3	6
	10	Ethics & Values (Unit-II)	AECC-2.5	1
		SEMESTER-III		
SECOND YEAR	11	Microeconomics – I	C-3.1	6
	12	Macroeconomics – I	C-3.2	6
	13	Statistical Methods for Economics	C-3.3	6
	14			
	15			
	16	Ethics & Values (Unit-III)	AECC-3.6	1
		SEMESTER-IV		
	17	Microeconomics – II	C-4.1	6
	18	Macroeconomics – II	C-4.2	6
	19	Research Methodology	C-4.3	6
	20	Introductory Macroeconomics	GE-4.4	6
	21			
	22	Ethics & Values (Unit-IV)	AECC-4.6	1
		SEMESTER-V		
FINAL YEAR	23	Indian Economy – I	C-5.1	6
	24	Development Economics – I	C-5.2	6
	25	Public Economics	DSE-5.3	6
	26	Introductory Econometrics / Odisha Economy	DSE-5.4	6
	27	Ethics & Values (Unit-V)	AECC-5.5	1
		SEMESTER-VI		
	28	Indian Economy – II	C-6.1	6
	29	Development Economics – II	C-6.2	6
	30	Applied Econometrics / Environmental Economics	DSE-6.3	6
	31	Research Project / International Economics	DSE-6.4	6
	32	Ethics & Values (Unit-VI)	AECC-6.5	1

Notes:
- C- Core Course
- GE- Generic Elective Course
- DSE- Discipline Specific Elective Course
- AECC- Ability Enhancement Compulsory Course
- SECC- Skill Enhancement Compulsory Course (Skill Based)
- For a 6 credit course, the total teaching hours are: Minimum- 50 Hours, Maximum-65 Hours

SEMESTER-I

C-1.1 : INTRODUCTORY MICROECONOMICS

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Exploring the Subject Matter of Economics, Markets and Welfare

The Ten Principles of Economics: How people make decisions; Working of the economy as a whole; Thinking Like an Economist: The economist as Scientist – The scientific method: Observation, Theory and more observation; Role of Assumptions; Economic Models; Why economists disagree; Graphs in Economics- coordinate system, slope, straight line & curved line

The Market Forces; Markets and Competition; The Demand and Supply curves – Market Vs Individual demand curves, Shifts in Demand and Supply Curves; Market Equilibrium and changes there in; Price Elasticity of Demand – determinants and computation; Income and Cross Elasticity of Demand; The Price Elasticity of Supply – determinants and computation; Consumer and Producer Surplus

UNIT - II: Theory of Consumer Choice

The Budget Constraint; Preferences – representing preferences with indifference curves; Properties of Indifference Curves; Two extreme examples of indifference curves; Optimization – Equilibrium; Change in equilibrium due to changes in income, changes in price; Income and Substitution Effect; Derivation of Demand Curve; Three applications – Demand for Giffen goods, Wages and Labour Supply, Interest rate and Household saving

UNIT - III: The Firm and Market Structures

Cost concepts; Production and Costs; The various measures of cost – Fixed and Variable cost, Average and Marginal cost; Cost curves and their shapes; Costs in the short run and in the long run; Economies and diseconomies of scale. Firms in Competitive Markets – What is a competitive market; Profit maximization and the competitive firm's supply curve; The marginal cost curve and the firm's supply decision; Firm's short-run decision to shut down; Firm's long-run decision to exit or enter a market; The supply curve in a competitive market – short run and long run.

UNIT - IV: The Input Markets

The Demand for Labour – The production function and the marginal product of labour; Value of the marginal product of labour and demand for labour; Shifts in labour demand curve; The supply of labour – the trade-off between work and leisure; Shifts in the labour supply curve; Equilibrium in the Labour Market; Other factors of production: Land and Capital; Linkages among factors of production

Text Book :
1.   Principles of Economics, Gregory N Mankiw, 6e Cengage Learning India Private Limited, New Delhi
Reference Book :
❖   Karl E. Case and Ray C. Fair (2007): *Principles of Economics*, 8th Edition, Pearson Education Inc.
❖   Pindyck, Robert and Daniel Rubinfeld (2018): Microeconomics, 9th Edition, Pearson Education Inc.
❖   H.R. Varian (2010) : See Page-9

C-1.2 : MATHEMATICAL METHODS FOR ECONOMICS - I

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Preliminaries and Functions of one Real Variable

Sets and set operations; Cartesian product; relations; functions and their properties; Number systems

Types of Functions- constant, polynomial, rational, exponential, logarithmic; Graphs and graphs of functions; Limit and Continuity of functions; Limit theorems

UNIT - II: Derivative of a Function

Rate of change and derivative; Derivative and slope of a curve; Continuity and differentiability of a function; Rules of differentiation for a function of one variable; Application- Relationship between total, average and marginal functions

UNIT - III: Functions of two or more Independent Variables

Partial differentiation techniques; Geometric interpretation of partial derivatives; Partial derivatives in Economics; Elasticity of a function – demand and cost elasticity, cross and partial elasticity

UNIT - IV: Matrices and Determinants

Matrices: concept, types, matrix algebra, transpose, inverse, rank; Determinants: concept, properties, solving problems using properties of determinants, solution to a system of equations - Crammer's rule and matrix inversion method

Text Book :

1. A. C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.

Reference Book :

❖ K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*. Pearson Educational Asia

GE-1.3 : MICRO ECONOMICS
(FOR COMMERCE STREAM)

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

Objective: Objective of the course is to acquaint the students with the concepts of microeconomics dealing with consumer behaviour. The course also makes the student understand the supply side of the market through the production and cost behaviour of firms.

Learning Outcomes: The students would be able to apply tools of consumer behaviour and firm theory to business situations.

UNIT – I: Demand and Consumer behaviour

Concept of demand: demand function, law of demand, and shifting of the demand curve, elasticity of demand, Consumer behaviour, Marshallian utility approach and Indifference Curve approach; utility maximization conditions. Income-Consumption Curve (ICC) and Price-Consumption Curve (PCC)

UNIT – II: Production and Cost

Production function: Short-run and Long-run; Total Product, Average Product and Marginal Product, Law of returns to a variable factor, Law of Returns to Scale; Concepts of Iso-quant and iso-cost line;

Cost: Accounting and Economic Costs; Social and Private Costs; Short-run and Long-run Costs; Relation between Average and Marginal

UNIT – III: Perfect Competition

Concept of Perfectly Competitive market: Assumptions, Profit maximization conditions; Related concepts of Total Revenue, Average Revenue and Marginal Revenue, Short-run and Long- run equilibrium of a firm; determination of short-run supply curve of a firm, measuring producer surplus under perfect competition

UNIT – IV: Imperfect Competition

Monopoly

Concept of Monopoly: Sources of monopoly power; Short-run and Long-run equilibrium of a monopoly firm; Price discrimination; Social Cost of Monopoly (concept only)

Monopolistic Competition & Oligopoly

Concept of Imperfectly Competitive market; Monopolistic Competition: Features and examples; Oligopoly: Non-Collusive Oligopoly: Sweezy's Kinked demand Curve Model, Collusive Oligopoly: Cartel (concept with example)

Text Books Recommended:

1. Micro Economics-K C Dash- Himalaya Publishing House
2. Ahuja, H.L, Micro Economics, S. Chand

Suggested Readings:

❖ Mehta P.K, Singh M. – Micro Economics – Taxmann Publication
❖ Micro Economics-T.R. Jain , B.D. Majhi, V.K. Global
❖ Browning, E.K. and J.M. Browning; Microeconomic Theory and Applications, Kalyani Publishers, New Delhi.
❖ Microeconomics I and Statistics: Das & Sengupta, Oxford University Press
❖ N. Gregory mankiw, Principles of Micro Economics, Cengage Learning
❖ Dwivedi, D.N. Micro Economics, Vikash Publication
❖ Pindyck, R.S., D. L. Rubinfeld and P. L. Mehta; Microeconomics, Pearson Education.
❖ N. Gregory mankiw, Principles of Micro Economics, Cengage Learning
❖ Maddala G.S.and E.Miller; Microeconomics: Theory and Applications, McGraw-Hill International.

AECC-1.5 (EV-I) : ETHICS & VALUES
UNIT-I : Issues Relating to Women

End Sem – 25 Marks
Full Marks – 25 Marks

1.1 Introduction:

General introduction on Ethics and Values, Gender equality as an essential precursor to social progress, the present scenario, Desirable gender related values

1.2 Women and Family:

Pre-natal sex selection, Gendered practices in the family, Gender based division of labour in the family, Marriage and women, Marriage and women's consent, Child marriage, Practice of dowry, Women and family violence

1.3 Women and Work:

Women's work: The Invisible hands, Exploitation of women at work, Gender Stereotyping at work, Glass Ceiling, Women and pay gap, Sexual Harassment of women at work, Working women and role conflict

1.4 Women, Community and Society:

Violence against women in public spaces, Gender sensitive language and communication, Gendered language, Sexist Language, Gender neutral language, Women and property Rights, Women's property Rights in Indian Laws, The functionality of Women's Property Rights

SEMESTER-II

C-2.1 : INTRODUCTORY MACROECONOMICS

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Basic Concepts in Macroeconomics

Macro vs. Micro Economics; Limitations of Macroeconomics; Stock and Flow variables, Equilibrium and Disequilibrium, Partial and General Equilibrium Statics – Comparative Statics and Dynamics; National Income Concepts – GDP, GNP, NDP and NNP at market price, factor cost, real and nominal; Disposable personal Income.

UNIT - II: Measurement of Macroeconomic Variables

Output, Income and Expenditure Approaches; Difficulties of Estimating National Income; National Income Identities in a simple 2-sector economy and with government and foreign trade sectors; Circular Flows of Income in 2, 3 and 4-sector economies; National Income and Economic Welfare; Green Accounting.

UNIT - III: Money and Changes in its Value

Evolution and Functions of Money, Quantity Theory of Money – Cash Transactions, Cash Balances and Keynesian Approaches, Value of Money and Index Number of Prices Inflation – Meaning, Causes, and Anti-Inflationary Measures; Classical, Keynesian, Monetarist and Modern Theories of Inflation, Inflationary Gap, Deflation-Meaning, Causes, and Anti-Deflationary Measures, Depression and Stagflation; Inflation vs. Deflation.

UNIT - IV: Determination of National Income

The Classical Approach - Say's Law, Theory of Determination of Income and Employment with and without saving and Investment; Basics of Aggregate Demand and Aggregate Supply and Consumption-Saving– Investment Functions, The Keynesian Approach– Basics of Aggregate Demand and Aggregate Supply and Consumption, Saving, Investment Functions; The Principle of Effective Demand; Income Determination in a Simple 2-Sector Model; Changes in Aggregate Demand and Income- The Simple Investment Multiplier

Text Book:

1. N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi
Reference Book:
❖ Richard T. Froyen (2005): *Macroeconomics*, 2nd Edition, Pearson Education Asia, New Delhi

C-2.2 : MATHEMATICAL METHODS FOR ECONOMICS - II

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: **Linear models:**
Input- Output Model: Basic concepts and structure of Leontief's open and static Input-Output model; Solution for equilibrium output in a three industry model; The closed model.

UNIT - II: Second and Higher Order Derivatives and Integration:
Technique of higher order differentiation; Interpretation of second derivative; Second order derivative and curvature of a function; Concavity and convexity of functions; Points of inflection, Derivative of Implicit Function; Higher Order Partial Derivative.
Indefinite Integrals; Rules of Integration; Techniques of Integration: Substitution Rule, Integration by parts, and Partial Fractions; Definite Integral – Area Interpretation.

UNIT - III: Single and Multivariable Optimization:
Optimum values and extreme values; Relative maximum and minimum; Necessary versus sufficient conditions - First and Second derivative tests (using Hessian Determinants); Economic applications thereof, First and second order condition for extrema of multivariable functions; Convex functions and convex sets.

UNIT - IV: Optimization with Equality Constraints:
Effects of a constraint; Finding stationary value – Lagrange-Multiplier method (Two variable single constraint case only): First and second order condition; The Bordered Hessian determinant.

Text Book:
1. A. C. Chiang and K. Wainwright (2005): *Fundamental Methods of Mathematical Economics*, McGraw Hill International Edition.

Reference Book:
❖ K. Sydsaeter and P. J. Hammond (2002): *Mathematics for Economic Analysis*. Pearson Educational Asia

GE-2.3 : MACRO & INDIAN ECONOMY
(FOR COMMERCE STREAM)

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

Objectives: The course aims at providing the student with knowledge of basic concepts of the macro economics. The modern tools of macro-economic analysis are discussed and the policy framework is elaborated, including the open economy.

UNIT – I: Introduction to Macro Economics
Introduction: Meaning and definition of Microeconomics and macroeconomics, Difference between Microeconomics and macroeconomics, macro-economic goals, components of Macroeconomics, Economic Systems: Mixed economy, Socialism economy, Capitalism economy and Islamic economy (only meaning and characteristics)

UNIT – II: National Income Accounting
Definition of National Income, Concepts of National Income, GDP and GNP, Methods of Measuring National Income, Uses of National Income, Difficulties in calculating National Income, Real Income, Per Capita Income and Growth Rate

UNIT – III: National Income Equilibrium
Concepts of Equilibrium, Consumptions & Savings, Investment Theory, Government Sector, Foreign Sector, Determination of Equilibrium, Multiplier Concept, Inflationary Gap and Deflationary Gap, Summary of Two-, Three- and Four-sector Economies

UNIT – IV: Role of Government
Economic functions of Government, Types of Budget, Government Revenue, Government Expenditure, Public Debt, and Government Policy
Macroeconomic Problems
Introduction, Business cycle, Unemployment, Inflation, Deflation, Depression, RBI and monetary policy

Learning Outcomes: Students would be able to apply the modern tools of macro-economic analysis so as to minimize the adverse impact of macro-economic factors on business.

Text Books Recommended:
1. Macro & Indian Economy, M. Treheran, T Treheran, V.K. Global publishing Pvt. Ltd., New Delhi
2. Ahuja H.L – Macro Economics – S. Chand

Suggested Readings:
❖ Mankiw, N. Gregory. Principles Macroeconomics. Cengage Learning
❖ Macro and Indian economy, P.K. Dhar, Kalyani Publishers
❖ Macro and Indian Economy-V K Puri- Himalaya Publishing House
❖ Dornbusch, Rudiger, Stanley. Fischer and Richard Startz, Macroeconomics. Irwin/McGraw-Hill.
❖ Vaish – Macro Economics – Vikash Publication
❖ Macroeconomics & Indian Economy: Bhattacharyya, Oxford University Press.

GE-2.3 : INDIAN ECONOMY - I
(FOR ARTS STREAM)

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Introduction to Indian Economy and Current Challenges
Basic features of India Economy; Indian Economy as a developing economy; Demographic trends in India - Size and growth of population, Occupational structure, Sex composition, Age structure and demographic dividend; Causes of population growth and population policy; The problem of unemployment and recent policies for employment generation; The problem of inequality in income distribution and its causes, Policies to address inequality.

UNIT - II: Indian Agriculture
Role of Agriculture in Indian Economy; Cause of low productivity, Green Revolution and Land Reforms, Agricultural Finance-Sources and Problems; Agricultural Marketing in India.

UNIT - III: Industrial Development in India
Role of Industrialization in Indian Economy; Small Scale & Cottage Industries: Meaning, Role, Problems and Remedies; Industrial Policies of 1948, 1956, 1977 and1991; Problems of Industrial Development in India; Industrial Sickness.

UNIT - IV: Service Sector in India
Growth & Contribution to GDP; Composition and relative importance of service sector; Factors determining growth of the sector; ICT and IT – Spread and Policy; Sustainability of services led growth.

Text Book:
1. Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Book:
❖ Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.

AECC-2.5 (EV-II) : ETHICS & VALUES
UNIT-II : Values and Good Citizenship

End Sem – 25 Marks
Full Marks – 25 Marks

2.1 Indian Constitution:
Salient Values of Preamble : Sovereign, Socialist, Secular, Democratic, Republic, Justice, Liberty, Equality and Fraternity

2.2 Patriotism:
Patriotic value and ingredients of nation building, Concept of Good citizenship, Emotional connection with the country, Duties of citizens and Qualities of good citizens

2.3 Volunteerism:
Concept of facets of Volunteerism and Leadership, Building a better society through Volunteerism, Blood Donation, Social Work, Helping the Aged, Environmental Protection

2.4 Work Ethics:
Punctuality, Cleanliness, Law abidingness, Rational Thinking and Scientific Temper

SEMESTER-III

C-3.1 : MICROECONOMICS - I

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Consumer Theory I

Preferences and Utility, Axioms of Rational Choice, Utility, Trades and Substitutions, Indifference curves; Mathematics of Indifference curves, Utility functions for specific preferences, the many good case; Utility Maximization and choice: the 2-good case (graphical analysis), the n-good case, Indirect utility function, the Lump sum principle, Expenditure minimization, properties of expenditure function.

UNIT - II: Consumer Theory II

The Income and Substitution Effects: Demand function, changes in income, changes in a goods price- Direct and Indirect Approaches (Slutsky), the Individual's Demand Curve, Compensated (Hicksian) demand curves and functions, demand elasticity, Consumer Surplus, Demand relationships among goods, the 2-good case, substitutes and complements, Net (Hicksian) substitutes, and Complements, Substitutability with many goods.

UNIT - III: Production Theory and Costs

Production Functions: Marginal productivity, Production with One Variable Input (labour) and with Two-Variable Inputs, Isoquant Maps and the Rate of Technical Substitution, Returns to Scale, Elasticity of Substitution, Some Simple Production Functions: Linear, Fixed Proportions, Cobb-Douglas; Technical Progress.

Definition of Cost and its properties, Cost minimizing input choices (Optimization principles, Expansion Path), Cost Functions and Shift in Cost Curves, Long-Run versus Short-Run Cost Curves.

UNIT - IV: Profit Maximization

The Nature and Behavior of Firms, Marginal Revenue – Relationship between Average and marginal revenue, Short-Run Supply by a Price-Taking Firm, Profit Functions and its Properties, Profit maximization – General conditions, Input demands.

Text Book Recommended:
1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.

Reference Books:
❖ H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8th Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

C-3.2 : MACROECONOMICS - I

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Consumption and Investment

Consumption – Income Relationship, Propensities to Consume and the Fundamental Psychological Law of Consumption; Implications of Keynesian Consumption Function; Factors Influencing Consumption Function; Measures to Raise Consumption Function; Absolute, Relative, Permanent and Life – Cycle Hypotheses

Autonomous and Induced Investment, Residential and Inventory Investment, Determinants of Business Fixed Investment, Decision to Invest and MEC, Accelerator and MEI, Theories of Investment.

UNIT - II: Demand for and Supply of Money

Demand for Money – Classical, Neoclassical and Keynesian Approaches, The Keynesian Liquidity Trap and its Implications, Supply of Money, The Theory of Money Supply Determination and Money Multiplier, Measures of Money Supply in India.

UNIT - III: Aggregate Demand and Aggregate Supply

Derivation of Aggregate Demand and Aggregate Supply Curves in the IS-LM Framework; Nature and Shape of IS and LM curves; Interaction of IS and LM curves and Determination of Employment, Output, Prices and Investment; Changes in IS and LM curves and their Implications for Equilibrium.

UNIT - IV: Inflation, Unemployment and Expectations, and Trade Cycles

Inflation – Unemployment Trade off and the Phillips Curve – Short run and Long run Analysis; Adaptive and Rational Expectations; The Policy Ineffectiveness Debate; Meaning and Characteristics of Trade Cycles; Hawtrey's Monetary Theory, Hayek's Over-investment Theory and Keynes' views on Trade Cycles.

Text Book:
1.   N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi.
Reference Book:
❖   Richard T. Froyen (2005): *Macroeconomics*, 2nd Edition, Pearson Education Asia, New Delhi.

C-3.3 : STATISTICAL METHODS FOR ECONOMICS

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Data Collection and Measures of Central Tendency and Dispersion
Basic concepts: population and sample, parameter and statistics; Data Collection: primary and secondary data, methods of collection of primary data; Presentation of Data: frequency distribution; cumulative frequency; graphic and diagrammatic representation of data; Measures of Central Tendency: mean, median, mode, geometric mean, harmonic mean, their relative merits and demerits; Measures of Dispersion: absolute and relative - range, mean deviation, standard deviation, coefficient of variation, quartile deviation, their merits and demerits; Measures of skewness and kurtosis.

UNIT - II: Correlation and Regression Analysis
Correlation: scatter diagram, sample correlation coefficient - Karl Pearson's correlation coefficient and its properties, probable error of correlation coefficient, Spearman's rank correlation coefficient. Two variable linear regression analysis - estimation of regression lines (Least square method) and regression coefficients - their interpretation and properties, standard error of estimate.

UNIT - III: Time Series and Index Number
Time Series: definition and components, measurement of trend- free hand method, methods of semi-average, moving average and method of least squares (equations of first and second degree only), measurement of seasonal component; Index Numbers: Concept, price relative, quantity relative and value relative; Laspeyer's and Fisher's index, family budget method, problems in construction and limitations of index numbers, test for ideal index number.

UNIT - IV: Probability Theory and Sampling
Probability: Basic concepts, addition and multiplication rules, conditional probability; Meaning of Sampling, Types of Sampling: Probability Sampling versus Non-Probability Sampling; Simple Random Sampling and its selection, Systematic Sampling, Multi-stage Sampling, Quota Sampling; Error: Sampling and Non-sampling.

Text book:
1.   S. C. Gupta (2017): *Fundamentals of Statistics*, Himalaya Publishing House, Delhi
Reference Book:
❖   Murray R. Speigel (2017): *Theory & Problems of Statistics*, Schaum's publishing Series.

AECC-3.6 (EV-III) : ETHICS & VALUES
UNIT-III : Issues of Drug, Tobacco and Alcohol Addiction

End Sem – 25 Marks
Full Marks – 25 Marks

3.1   Extent of the Problem:
Extent of Drug and Tobacco addiction and alcoholism in India, Myths associated with them, Health hazards associated with them and how they have become silent killers

3.2   Socio-economic impact:
Socio-economic impact of Drug and Tobacco addiction and alcoholism:
Loss of physical and mental strength, Loss of character, Loss of family ties and relationship, Loss of earning and livelihood potentials, Loss of societal respect and dignity etc

3.3   Laws to Address this Problem:
Silent features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention, deaddiction and rehabilitation

3.4   Role of Stake - holders:
Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGOs and other agencies

SEMESTER-IV

C-4.1 : MICROECONOMICS - II

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Firm Supply and Equilibrium

Market Environments; Pure competition; Supply decision of a competitive firm and Exceptions; Inverse Supply Function; Profits and Producer's Surplus; Long Run Supply Curve of a Firm; Long Run Average Costs; Short Run and Long Run Industry Supply; Industry Equilibrium in Short and Long Run; Meaning of Zero Profits; Economic Rent

UNIT - II: General Equilibrium, Efficiency and Welfare

The Edge worth Box; Trade; Pareto Efficient Allocations; Existence of equilibrium and efficiency; The Welfare Theorems and their implications; The Firm; Production and the Welfare Theorems ; Production possibilities, comparative advantage and Pareto efficiency

UNIT - III: Market Imperfections: Monopoly and Oligopoly

Barriers to Entry, Profit Maximization and Output Choice, Monopoly and resource Allocation, Monopoly, Product Quality and Durability, Price Discrimination, Second Degree Price Discrimination through Price Schedules, Regulation of Monopoly, Dynamic Views of Monopoly. Monopolistic competition; Price output determination; excess capacity under monopoliostic competition

UNIT - IV: Game Theory

The Payoff Matrix of a Game; Nash Equilibrium; Mixed Strategies ; The Prisoner's Dilemma; Repeated Games; Enforcing a cartel; Sequential Games; A Game of entry deterrence. Oligopoly – Choosing a strategy; Quantity and price leadership; Simultaneous Quantity Setting; Example of Cournot Equilibrium; Simultaneous Price Setting; Collusion

Text Book:

1. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8th Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

Reference Books:

❖ C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.

❖ Pindyck, Robert and Daniel Rubinfeld (2018): Microeconomics, 9th Edition, Pearson Education Inc.

C-4.2 : MACROECONOMICS - II

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Modeling Economic Growth

Accumulation of Capital in the basic Solow Model; supply and demand for goods, growth in the capital stock and the steady state, Golden rule level of capital: Comparing steady states, transition to the golden rule steady state with too much and too little capital, Population Growth, Technological Progress- Solow version, Beyond Solow Model and Endogenous Growth.

UNIT - II: Open Economy and Macroeconomic Policy

Balance of payments- concept; meaning of equilibrium and disequilibrium in balance of payments; Determination of foreign exchange rate- the balance of payments theory; Fixed versus flexible exchange rates; Short-run open economy model- the basic Mundell-Fleming model; Macroeconomic Policies – Fiscal policy, Crowding –out and Crowding – in; Monetary policy and instruments, the Transmission Mechanism; Effectiveness of macroeconomic policies in open and
closed economies.

UNIT - III: Classical and Keynesian Macroeconomics Thoughts

Keynes verses classics: Classical macroeconomics, Employment and output determination, Say's law, the quantity theory of money, Keynes's General theory: Keynes's main propositions; analysis of the labour market, Keynes's critique of Say's law and Quantity theory of money, the orthodox Keynesian school, underemployment equilibrium in the Keynesian model, the Phillips curve and orthodox Keynesian school.

UNIT - IV: Monetarist and New Classical Macroeconomic Thoughts

The orthodox monetarist school, the Quantity Theory of Money approach, the expectations augmented Phillips curve analysis, the orthodox monetarist school and stabilization policy. New Classical Economics: The influence of

Robert e Lucas Jr, the structure of new classical models: the Rational Expectations hypothesis; and policy implications.

Text Book:
1. N. Gregory Mankiw (2010): *Macroeconomics*, 7th edition, Cengage Learning India Private Limited, New Delhi
Reference Book:
❖ Brian Snowdon and Howard R Vane (2005): Modern Macroeconomics: Its Origins, Development and Current State, Edward Elgar

C-4.3 : RESEARCH METHODOLOGY

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Basics of Research
Introduction to Research: Meaning, Objectives, Motivation, Types, Approaches, Significance, Research Process, Criteria of Good Research; Qualities of a Good Researcher, Research as a Career

UNIT - II: Research Problem
Defining the Research Problem: What is a Research Problem? Selecting the Problem, Necessity of Defining the Problem, Technique Involved in Defining a Problem; Research Design: Meaning, Need, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs, Basic Principles of Experimental Designs

UNIT - III: Issues in Research
Measurement in Research, Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Techniques of Measurement Tools, Scaling and Important Scaling Technique Research Ethics: codes and ethics, permissions to research, responsibilities, confidentiality, feedback, participatory research; Research Proposal and literature review: research proposal, review of literature, levels of analysis, using the library and internet, abstracting, word processing, plagiarism, Concept of IPR

UNIT - IV: Actions in Research
English in report writing: words, sentences, paragraph, writing style; The Report: improving quality, sections, drawing conclusions, evaluation checklists, persistence; Common Citation Styles

Text Book:
1. Kothari, C. R. (2004): Research Methodology: Methods and Techniques, New Age International Private Limited Publishers, New Delhi.
Reference Book:
❖ Guthrie, G. (2010): Basic Research Methods, Sage Publications India Private Limited, New Delhi.

GE-4.4 : INDIAN ECONOMY - II
(FOR ARTS STREAM)

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: External Sector in India
Trends, Composition & Direction in exports from and imports of India; Problems of Balance of Payment: Causes of deficit in BOP & measures to correct it; Trade Policy- Export Promotion Vs Import Substitution; Foreign Trade Policy of India; WTO and India.
UNIT - II: Financial Markets in India
Commercial Banking in India- Nationalization of Banks; Lead bank scheme and branch expansion; RBI - Functions, Monetary Policy; Development Banking- IFCI,IDBI, SIDBI and NABARD
UNIT - III: Indian Public Finance
Public Expenditure-Growth and Composition, Causes of Growth of Public Expenditure in India: Tax Revenue of Central and State Governments; Concept of VAT; Deficit Financing in India-Revenue, Budget, Fiscal and Primary Deficits; Purpose and Effects of Deficit Financing; India's Fiscal Policy-Objectives.
UNIT - IV: Current Challenges Facing Indian Economy
Inflation – Causes, Consequences and Anti-inflationary Policy; Poverty – Poverty line and Estimates, Major Poverty Alleviation Programmes; Environmental Degradation – Growth and Environment; Population Growth and

Environment; Environment Policy; Economic Reforms- Globalization, Macroeconomic Stabilization, Structural Reforms, and their impact on the Indian Economy; Foreign capital and MNCs-Role and consequences.

Text Book:
1. Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai.

Reference Book:
❖ Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.
❖ Basu, Kaushik (2016): An Economist in the Real World: The Art of Policy Making in India, enguin.

AECC-4.6 (EV-IV) : ETHICS & VALUES
UNIT-IV : Ethical Values for Student Life

End Sem – 25 Marks
Full Marks – 25 Marks

4.1 Extent of the Problem:
Extent of Drug and Tobacco addiction and alcoholism in India, Myths associated with them, Health hazards associated with them and how they have become silent killers

4.2 Socio-economic impact:
Socio-economic impact of Drug and Tobacco addiction and alcoholism:
Loss of physical and mental strength, Loss of character, Loss of family ties and relationship, Loss of earning and livelihood potentials, Loss of societal respect and dignity etc

4.3 Laws to Address this Problem:
Silent features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention, deaddiction and rehabilitation

4.4 Role of Stake - holders:
Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGOs and other agencies

SEMESTER-V

C-5.1 : INDIAN ECONOMY - I

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Basic Characteristics of Indian Economy as a Developing Economy
Indian Economy in the Pre-British Period; The Structure and Organization of Villages and Towns; Industries and Handicrafts in Pre-British India; Colonialism; Economic Consequences of British Rule; Decline of Handicrafts and Progressive Ruralization; The Land System and Commercialization of Agriculture; Industrial Transition; Colonial Exploitation and Impacts – Underdevelopment; Colonization and Modernization; State Policies and Economic Underdevelopment; The Current State of Indian Economy

UNIT - II: Population and Human Development
Population Growth and Economic Development – size, growth and future of population; Causes of rapid population growth; Population and economic development; Population policy; Demographic issues– Sex and Age Composition of population; Demographic Dividend; Urbanization and Migration; Human Resource Development – Indicators and importance of Human Resource Development; Education policy; Health and nutrition

UNIT - III: National Income in India – The Growth Story and Current Challenges
Trends in national and per capita income; Changes in sectoral composition of national income; Regional disparities in Growth and Income; Savings and Investment and Economic Growth – The Linkage; Poverty – Estimation and Trends, Poverty Alleviation Programs– MGNREGA, NRLM, SJSRY; Inequality –Measures and trends in India; Unemployment– Nature, Estimates, Trends, Causes and Employment Policy

UNIT - IV: Economic Planning in India

Rationale, Features, Objectives, Strategies, Achievements and Assessment of Planning in India; Eleventh Five Year Plan– Objectives, Targets and Achievements; Twelfth Five Year Plan – Vision and Strategy; From Planning to NITI– Transforming India's Development Agenda

Text Book:

1. Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Books:

❖ Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.

❖ Indian Economy Datt and Sundharam, Gaurav Datt and Ashwani Mahajan, S Chand Publications, 7th Revised Edition

❖ Indian Economy Since Independence, ed by Uma Kapila, Academic Foundation, Revised Nineteenth Edition 2008-09

❖ Government of India (Current Year): Economic Survey, Ministry of Finance, New Delhi

C-5.2 : DEVELOPMENT ECONOMICS - I

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Study of Economic Development

Development Economics as subject; economic growth and economic development; Characteristics of underdeveloped countries – vicious cycle of poverty and cumulative causation; obstacles to economic development; measures of economic development – national and per capita income, basic needs approach, capabilities approach, three core values of development, PQLI, HDI, HPI, MDPI, GDI; capital formation and economic development.

UNIT - II: Theories of Economic Growth and Development

Classical theory, Marxian theory; Schumpeterian theory; Rostow's stages of economic growth; Solow model and convergence with population growth and technical progress.

UNIT - III: Poverty, Inequality, Agriculture, Industry and Development

Measuring poverty: Head Count Ratio, Poverty Gap Ratio, Squared Poverty Ratio, FGT Ratio; Measuring Inequality – Lorenz curve and Kuznets' inverted U hypothesis; Growth, poverty and inequality; Policy options – some basic considerations.

Agriculture, Industry and Economic Development: Role of agriculture; Transforming traditional agriculture; Barriers to agricultural development; Role of industrialization; Interdependence between agriculture and industries – A model of complementarities between agriculture and industry; terms of trade between agriculture and industry; functioning of markets in agrarian societies; interlinked agrarian markets.

UNIT - IV: Institutions and Economic Development:

Role of institutions in economic development; Characteristics of good institutions and quality of institutions; The pre-requisites of a sound institutional structure; Different measures of institutions – aggregate governance index, property rights and risk of expropriation; The role of democracy in economic development; Role of markets and market failure; Institutional and cultural requirements for operation of effective private markets; Market facilitating conditions; Limitations of markets in LDCs; Corruption and economic development – tackling the problem of corruption.

Text book:

1. Todaro, Michael P and Stephen C Smith (2006): *Economic Development*, 8th Edition, Pearson

Reference Books:

❖ Debraj Ray (2009): *Development Economics,* Oxford University Press.

❖ Thirlwall, A P (2011): *Economics of Development*, 9th Edition, Palgrave Macmillan

DSE-5.3 : PUBLIC ECONOMICS

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Introduction to Public Finance and Public Budgets

Public Finance: meaning and scope, distinction between public and private finance; public good verses private good; Principle of maximum social advantage; Market failure and role of government; Public Budget: kinds of

budget, economic and functional classification of the budget; Balanced and unbalanced budget; Balanced budget multiplier; Budget as an instrument of economic policy.

UNIT - II: Public Expenditure
Meaning, classification, principles, cannons and effects, causes of growth of public expenditure, Wagner's law of increasing state activities, Peacock-Wiseman hypotheses.

UNIT - III: Public Revenue
Sources of Public Revenue; Taxation - meaning, cannons and classification of taxes, impact and incidence of taxes, division of tax burden, the benefit and ability to pay approaches, taxable capacity, effects of taxation, characteristics of a good tax system, major trends in tax revenue of central and state governments in India.

UNIT - IV: Public Debt
Sources, effects, debt burden – Classical/Ricardian views, Keynesian and post-Keynesian views; shifting - intergenerational equity, methods of debt redemption, debt management, tax verses debt.

Text Books:
1. J. Hindriks and G. Myles (2006): *Intermediate Public Economics*, MIT Press.

Reference Book:
❖ R. A. Musgrave and P. B. Musgave (1989): *Public Finance in Theory and Practices.* McGraw Hill
❖ Bhatia H L (2018): *Public Finance.* Vikas Publishing House.

DSE-5.4 : INTRODUCTORY ECONOMETRICS

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Introduction
Definition, Nature and scope of econometrics; Theoretical Probability Distributions: Binomial, Poisson and Normal distributions: their properties Theory of Estimation: Estimation of parameters; properties of estimators – small sample and asymptotic properties; point and interval estimation.

UNIT - II: Hypothesis Testing
Testing of hypotheses: defining statistical hypotheses; Simple and composite hypotheses; Null and alternative hypothesis; Type I and Type II errors, Critical region; Neyman-Pearson lemma; Power of a test; Test statistics: z, chi square, t and F.

UNIT - III: Linear Regression Analysis
Two variable linear regression model – Assumptions; Least square estimates, Variance and covariance between Least square estimates; BLUE properties; Standard errors of estimates; Coefficient of determination; Inference in a two variable linear regression model; ANOVA; Forecasting. Introduction to multiple regression models.

UNIT - IV: Violation of Classical Assumptions
Heteroscedasticity, Multicollinearity and Auto-correlation: Meaning, consequences, tests and remedies.

Text Book:
1. Gujarati, D & Sangeetha (2007); "Basic Econometrics", McGraw Hill Book Co.

OR

DSE-5.4 : ODISHA ECONOMY

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Odisha Economy before 1947
Orissa's Economy in the Nineteenth Century: Benevolence or Exploitation, Forces of Nature, Animal Power, The Company Steps in, Public Works and Public Health, Education, Disintegration of Village Economy, New Social Environment, Changing Position of Social Classes, The Moneylenders, The Borrowers, Money-flows from Village to Metropolis, Pauperization of Peasantry, The Wage Earners, Demographic Changes, Profiting from Rural Adversity; Diarchy in 1919 and Separation of Provincial Finances from Central Government in 1937; Emergence of Federal Finance (Ref.: Das 1976a and 1976b, GoO 2016).

UNIT - II: Macro Economy of Odisha
A macro glance of Odisha economy: aggregate income, broad sectoral decomposition, performance of districts, employment, child labour and bonded labour, employment programmes, consumption expenditure, cost of living; Odisha State public finances (Chapter 14 and 15 of Ref 1; & Chapter 2 and 9 of Ref 2).

UNIT - III: Agriculture, Industry, Infrastructure and Environment in Odisha

Agriculture: land ownership and land tenure, agricultural wages and rural unemployment, production and productivity of major crops, agricultural inputs, agricultural policy; Animal Husbandry; Fisheries (Chapter 1 to 3 of Ref 1; & Chapter 3 of Ref 2)

Industry: Investment, industrial policy, and the growth of large industries, mining and quarrying; Construction; tertiary sector: tourism, transport and power; Water Resources, Forest Resources (Chapter 4 to 8 of Ref 1; & Chapter 4 & 5 of Ref 2).

UNIT - IV: Social Sector in Odisha

Poverty: income poverty and inequality; health sector: outcomes, infrastructure, finance, public health, NRHM; education: Literacy, Primary education, secondary education, higher education, SSA; human development (Chapter 9 to 13 of Ref 1; & Chapter 7 & 8 of Ref 2).

Text Book:

1. Nayak, P., Panda, S. C., Pattanaik, P. K. (2016): The Economy of Odisha: A Profile, Oxford University Press, New Delhi.

Reference Book:

❖ GoO (Latest): Odisha Economic Survey, Planning and Convergence Department, Directorate of Economics and Statistics, Government of Odisha, Bhubaneswar.

❖ GoO (2004): *Human Development Report 2004 Orissa*, Planning and Coordination Department, Government of Odisha, Bhubaneswar.

❖ GoO (2018): 80 Years Odisha Budget: Commemorative Volume, Department of Finance, Bhubaneswar.

AECC-5.5 (EV-V) : ETHICS & VALUES
UNIT-V : Vulnerable Sections of Society: Understanding their Issues

End Sem – 25 Marks
Full Marks – 25 Marks

5.1 Extent of the Problem:

Extent of Drug and Tobacco addiction and alcoholism in India, Myths associated with them, Health hazards associated with them and how they have become silent killers

5.2 Socio-economic impact:

Socio-economic impact of Drug and Tobacco addiction and alcoholism:

Loss of physical and mental strength, Loss of character, Loss of family ties and relationship, Loss of earning and livelihood potentials, Loss of societal respect and dignity etc

5.3 Laws to Address this Problem:

Silent features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention, deaddiction and rehabilitation

5.4 Role of Stake - holders:

Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGOs and other agencies

SEMESTER-VI

C-6.1 : INDIAN ECONOMY - II

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Agricultural Development in India

Indian Agriculture: nature, importance, trends in agricultural production and productivity, factors determining production, land reforms, new agricultural strategies and green revolution, rural credit; Agricultural marketing and warehousing.

UNIT - II: Industrial Development in India

Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991; Industrial Licensing Policies – MRTP Act, FERA and FEMA; Growth and problems of SSIs, Industrial sickness; Industrial finance; Industrial labour.

UNIT - III: Tertiary Sector, HRD and the External Sector

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development – concept, evolution, measurement; HRD: indication, importance, education in India, Indian educational policy; Health and Nutrition.

Foreign Trade: role, composition and direction of India's foreign trade, trends of export and import in India, export promotion verses import substitution; Balance of Payments of India; India's Trade Policies; Foreign Capital – FDI, Aid and MNCs.

UNIT - IV: Indian Economy and Environment

Environmental Policies in India: The Environment (Protection) Act 1986, The Environment (Protection) Rules 1986, The National Forest Policy 1988, Policy statement for Abatement of Pollution 1992, National Conservation Strategy and Policy Statement on Environment and Development 1992, The National Environment Appellate Authority Act 1997, National Environmental Policy 2006; Global deal with Climate Change: Introduction, Intergovernmental Panel for Climate Change (IPCC), Impact of Climate Change on India, Global Response on Climate Change, Possible Role of India.

Text Book:

1. Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Books:

❖ Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.

❖ Indian Economy Datt and Sundharam, Gaurav Datt and Ashwani Mahajan, S Chand Publications, 7th Revised Edition

❖ Indian Economy Since Independence, ed by Uma Kapila, Academic Foundation, Revised Nineteenth Edition 2008-09

❖ Government of India (Current Year): Economic Survey, Ministry of Finance, New Delhi

C-6.2 : DEVELOPMENT ECONOMICS II

Full Marks – 100
Mid Sem – 20/1hr
End Sem – 80/3 hrs

UNIT - I: Population and Development

Demographic concepts : birth and death rates, age structure, fertility and its determinants, the Malthusian population trap and the microeconomic household theory of fertility; costs and benefits of population growth and the model of low level equilibrium trap; rural-urban migration – the Harris Todaro migration model and policy implications

UNIT - II: Dualism and Economic Development

Dualism – geographic, social and technological; the theory of cumulative causation (Myrdal); the regional inequalities in the context of economic development; the inverted U relationship; international inequality and the centre periphery thesis; dependency, exploitation and unequal exchange; the dualistic development thesis and its implications

UNIT - III: Environment and Development

Basic issues of environment and development – Development and environment inter-linkage; Poverty, environmental degradation and externalities; common property resources, renewable and non-renewable resources; concept of sustainable development; basics of climate change

UNIT - IV: International Trade and Economic Development and Financing Economic Development

Trade and economic development; export led growth; terms of trade and economic growth – the Prebisch Singer Hypothesis; trade strategies for development – import substitution vs. export promotion; international commodity agreements; trade vs aid.

Saving, capital formation and economic development; financial sector and economic development; taxation, public borrowing and economic development; inflation, foreign finance, investment and foreign aid – controversies and opportunities

Text Book:

1. Todaro, Michael P and Stephen C Smith (2006): *Economic Development*, 8th Edition, Pearson.

Reference Book:

❖ Thirlwall, A P (2011): *Economics of Development*, 9th Edition, Palgrave Macmillan.

DSE-6.3 : APPLIED ECONOMETRICS

Full Marks - 100
Mid Sem – 20/1 hr
End Sem – 80/3 hrs

UNIT-I :
Stages in Empirical Econometric Research
UNIT-II : Regression Diagnostics and Specification
Misspecification; functional forms; model selection.
UNIT-III : Advanced Topics in Regression Analysis
Selected Topics: Dynamic Econometric Models: distributed lag models; autoregressive models; instrumental variable estimation; simultaneous equation models.
UNIT-IV : Panel Data Models
Methods of estimation; fixed effects model; random effects model.

Suggested Books:
1.   Jeffrey M. Wooldridge, *Econometrics*, CENGAGE learning, India Edition, 2009.
2.   Dimitrios Asteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.
3.   Damodar Gujarati, *Econometrics by Example*, Palgrave Macmillan, 201

OR

DSE-6.3 : ENVIRONMENTAL ECONOMICS

Full Marks - 100
Mid Sem – 20/1 hr
End Sem – 80/3 hrs

UNIT - I: Economy and Environment
Nature and Scope of Environmental Economics- Environment and Economy interaction; Environment as a public good- Serious environmental problems of Developing Countries – Air pollution, water pollution and deforestation. Global environmental problems, trade and environment, International Cooperation for Environmental Protections, Montreal and other protocols.
UNIT - II: The Economics of Pollution and Climate change
Pollution as externality, The market Approach to optimal pollution, Property rights and market bargain theorems, Coase theorem; Pigouvian Taxation, Subsidies and optimal pollution; Climate change – concept, causes, effects and management.
UNIT - III: Valuation of Environmental Damage
Methods and difficulties of environmental valuation, Economic value, Use value, Option value, Existence value; Direct and Indirect Valuation of Environmental Goods: The hedonic price approach, Contingent valuation, Travel cost approach.
UNIT - IV: Natural Resources and Sustainable Development
Natural resources- Renewable and exhaustible; Tragedy of commons, People's Participation in the management of common property resources; Sustainable Development Concepts, Sustainability rules, Indicators of sustainability, Solow/Hartwick, Natural capital stock, Safe Minimum Standard.

Text Book:
1.   Bhattacharya, R. N. (2002): Environmental Economics: An Indian Perspectives, OUP, New Delhi
Reference Book:
❖   Kolstad, C.D (1999); Environmental Economics Oxford University Press, New Delhi

DSE-6.4 : INTERNATIONAL ECONOMICS

Full Marks - 100
Mid Sem – 20/1 hr
End Sem – 80/3 hrs

UNIT - I: Importance of Trade and Trade Theories
Importance of the study of International Economics; Inter-regional and international trade; Theories of Trade-absolute advantage (Adam Smith), comparative advantage (David Ricardo) and opportunity cost (Haberler); Heckscher-Ohlin theory of trade — its main features, assumptions and limitations (Leontief Paradox) Factor Price Equalization theorem.

UNIT - II: Trade Policy and International Economic Institutions
Concepts of terms of trade and their importance; Doctrine of reciprocal demand – Offer curve technique; Gains from trade ;Trade as an Engine of Growth and Concept of immiserizing growth, Tariffs and quotas – their impact in partial equilibrium analysis; General Equilibrium analysis of tariff and the concept of optimum tariff, Functions of IMF (Conditional Clause), Role of IMF in international liquidity, Reforms for the emergence of international monetary system; World Bank and WTO; Their achievements and failures; Their Role from the point of view of India.

UNIT - III: Exchange Rate
Concept and Types of Exchange Rate (bilateral vs. trade-weighted exchange rate, cross exchange rate, spot, forward, futures), Demand for and Supply of foreign exchange, Exchange Rate Determination: Mint Parity Theory, Purchasing-Power Parity Theory, Fixed versus Flexible exchange rate.

UNIT - IV: Balance of Trade and Payments
Concepts and components of balance of trade and balance of payments; Disequilibrium in balance of payments; Various measures to correct deficit in BOPs (Expenditure switching and expenditure reducing policies, Direct control), Depreciation Vs. Devaluation; Elasticity approach to devaluation, Foreign trade multiplier- Concept and implications.

Text Book:
1. Mannur H. G (Recent Edition) *International Economics*, Vikash Publishing
Reference Books:
❖ Salvatore Dominick, *International Economics*, WileIndia.
❖ Sodersten Bo and Reed J, *International Economics*, McMillan Publisher

OR

DSE-6.4 : DISSERTATION / RESEARCH PROJECT

Full Marks – 100
End Sem Project– 100

(College can give this choice only for students with above 60% aggregate marks)

Introduction : The project is intended to establish the connection between Economics as confined to the text books and class rooms and Economics at play in the ground. It is expected to give an empirical content to the subject. Economics is defined as the study of mankind in the ordinary business of life. It studies individual as well as group behavior. Project work at the undergraduate level is an in-depth study on a topic chosen by the student. The objective of the project work for the students at undergraduate level is to expose students to the social and real world contexts in which the subjects taught in the classroom have applications. Therefore, the topic must be related to the field of study the student is enrolled. It is undertaken with the guidance of a faculty supervisor, and involves a prolonged period of investigation and writing. The supervisor is supposed to help the student and mentor him/her throughout, from selection of the topic to submission of the project report. The project output will be a project report written on the topic, chosen by the student and approved by the guide, in about 10000 words.

The process of project preparation typically comprises of an investigation of a particular topic, based on the application of philosophical and theoretical knowledge available in the already existing scientific literature and other published sources of information. The student may use already available data (texts, documents, artworks or existing data sets) or she may go for collection of data from the field. The final report should ideally have the following sections.

1. Abstract (in about 500 words) containing a summary of the entire report.
2. Introduction of the topic, arguments for choosing such a topic and the key investigation propositions.
3. A review of the existing knowledge on the topic
4. Information on the data and data treatment tools used in the study

5. An analysis of data and findings
6. Conclusions
7. References

A good research project requires sincere efforts and honest dedication from students. Moreover, it requires an engagement of the student with an issue under probe for a fairly long period of time compared to their preparations of subjects for the examination. A successful completion of the project report has several positive learning outcomes for the student. It empowers the student with the life skill of patience and persistence. It also helps the student to locate her theoretical understandings in the context of socio-economic and political realities.

AECC-6.5 (EV-VI) : ETHICS & VALUES
UNIT-VI : Environmental & Techno Ethics

End Sem – 25 Marks
Full Marks – 25 Marks

6.1 Environmental Ethics:
Types of Ecological Values, Environmental Values & Valuing Nature, Equitable use of Resources, Role of Individual in the conservation of resources for future generation, Bio-Ethics-Genetic manipulation in plants and animals for benefits of society and cruelty against animal.

6.2 Promotion of Green Technology:
Goal of Green Technology: Reduce recycling, **Renew** (removal of chemicals),
Refuse and **Responsibility**.
Green Technology in relation to :- Energy and Construction.

6.3 Ethics and Technology:
Ethics and Technology with reference to Science, gadget, machine etc. and interaction with each other,
Agricultural, Industrial, Digital, Globalized Age etc

6.4 Judicious Use of Technology:
Judicious use of Mobile Phones, Electrical machines, Plastics, Television, Computers and their harmful effects
Ethics and Use of Digital Technology: Cyber ethics- Crimes and Ethical hacking,
Ethics of social media: WhatsApp, Facebook, Twitter and others

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