Syllabus for
Master of Arts in Economics
Under Choice Based Credit System

Academic Session:
w.e.f. 2020-2022

for
University Department of Economics &
Constituents Colleges Having P.G Teaching in
Economics.

Binod Bihari Mahto Koyalanchal
University, Dhanbad

Members of Board of Studies of CBCS Post-Graduate Syllabus as per Guidelines of the Binod Bihari MahtoKoyalanchal University, Dhanbad

1. **Chairman :**

Dr. Ranjana Srivastava, Head, University Department of Economics, BBMKU, Dhanbad

2. **External Expert Members :**

i) Dr.Sajal, University Department of Economics, Vinoba Bhave University

ii) Dr Madhumita Dasgupta, University Department of Economics,Ranchi University

3. **Members :**

i) Dr. Pushpa Kumari, Associate Professor, University Department of Economics, BBMKU, Dhanbad.

ii) Dr.Munmun Sharan, Asstt. Professor, University Department of Economics, BBMKU, Dhanbad.

COURSE STRUCTURE
Semester Wise Examination/Course Structure for Economics Faculty

Semester	Paper Code (Credit, Lectures)	Paper Name	Full Marks	End Semester Marks	Mid Semester (Internal) Marks (Written 20 marks) + Day to Day assessment includes extracurricular activities (5 marks) + Attendance (5 marks)
I	ECN-F-101 (5 Credits, 60 Lectures + 15 Tutorials)	Foundation of Mathematical Economics	100	70	30
	ECN-C-102 (5 Credits, 60 Lectures + 15 Tutorials)	Micro Economics - I	100	70	30
	ECN-C-103 (5 Credits, 60 Lectures + 15 Tutorials)	Macro Economics	100	70	30
	ECN-C-104 (5 Credits, 60 Lectures + 15 Tutorials)	Demography	100	70	30
II	ECN-S-205 (5 Credits, 60 Lectures + 15 Tutorials)	Skill Development Course (SEC) Statistical Skill for Economics	100	70	30
	ECN-C-206 (5 Credits, 60 Lectures + 15 Tutorials)	Money & Financial Market	100	70	30
	ECN-C-207 (5 Credits, 60 Lectures + 15 Tutorials)	Indian Economy	100	70	30
	ECN-C-208 (5 Credits, 60 Lectures + 15 Tutorials)	Economics of Growth & Development	100	70	30
III	ECN-A-309 (5 Credits, 60 Lectures + 15 Tutorials)	Open Elective	100	70	30
	ECN-C-310 (5 Credits, 60 Lectures + 15 Tutorials)	Micro Economics-II	100	70	30
	ECN-C-311 (5 Credits, 60 Lectures + 15 Tutorials)	Public Finance	100	70	30
	ECN-C-312 (5 Credits, 60 Lectures + 15 Tutorials)	International Economics	100	70	30

IV	ECN-E-413A/ ECN-E413B/ ECN-E-413C (5 Credits, 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory **A:** Advanced Mathematical Economics **B:** Agricultural Economics **C:** Industrial Economics	100	70	30
	ECN-E-414A/ ECN-E-414B/ ECN-E-414C (5 Credits, 60 Lectures + 15 Tutorials)	Discipline Centric Elective Theory **A:** Advanced Econometrics **B:** Indian Agriculture **C:** Labour Economics	100	70	30
	ECN-C-415 (5 Credits, 60 Lectures + 15 Tutorials)	Economics of Social Sectors	100	70	30
	ECN-D-416 (5 Credits, 60 Lectures + 15 Tutorials)	Dissertation	100	70	30

Note: Symbol of Paper: The first three symbols in Roman capital letters indicate the subject. The next symbol(s) denotes Foundation (F), Core (C), Discipline Centric Elective (E), Skill Enhancement Course ie. SEC (S), etc. Out of the next three digits, the first digit indicates the semester e.g. 1,2,3,4 for semester I, II, III, IV respectively, and the next two digits indicate paper number. The last letter T indicates Theory
Eg **ECN-F-101**: This denotes the 1st paper of 1st Semester of Foundation course in Economics

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SEMESTER I : Paper- ECN-F-101

FOUNDATIONS OF MATHEMATICAL ECONOMICS
(Compulsory Foundation Course)
(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks(Mid Semester) + 70 marks(End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks(Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

Module I : Sets , and Functions in Economics
1.1 Set Theory & its operations; Venn diagrams
1.2 Functions and their graphical representations- Linear, Parabolic, Exponential and Logarithmic functions; Economic applications of equations (Cost and Product functions).
1.3 Solution of equations in one variable and Simultaneous equations in two variables; Economic applications – Market and Keynesian Macroeconomic Model.

Module II : Derivatives and Economic Applications
2.1 Limits and Continuity of functions.
2.2 Differentiation – Rules; Relation between Total, Average and Marginal Cost and Revenues;
2.3 Partial Derivatives and it's application:Elasticity of Demand and other Economic functions; Properties of Homogeneous production function; Euler's Theorem
2.4 Higher order Derivatives of functions in one variable, Convexity of Curves.
2.5 Partial Differentiation of multivariate functions; Application to MU , MP , MRS , MRTS , Mixed Partial Derivatives and Young's Theorem.

Module III : Differential Calculus & Extreme Values (Optimisation).
3.1 Unconstrained Maxima and Minima of functions in one variable; Application to profit & costs; Point of inflexion and application to Total Product Curve.
3.2 Pricing under Perfect Competition; Monopoly; Duopoly; Taxation in Monopoly Market
3.3 Constrained optimisation – Utility, Product & Cost function.

Module IV : Integral Calculus and Applicationsin Economics
4.1 Indefinite Integrals & inverse differentiation, derivative of total from marginal utility, marginal cost & marginal product.
4.2 Standard formsof Integration;Integration of Exponential and Logarithmic functions; Integration by substitution; Integration by parts.
4.3 Definite Integrals and its application – Consumer's Surplus & Producer's Surplus.

Module V : Basics of Matrix Algebra
5.1 Matrix operations: Determinants; Singular & Non- Singular Matrix; Transpose of matrix; Co-factor of a matrix. Inverse of matrix; Rank of matrix.
5.2 Solution of a System of Non- homogeneous linear equations by Matrix Method.

Module VI : Application of Matrix Algebra
6.1 Linear Programming: Meaning; Solution of a linear programming problem by graphical method.
6.2 Game Theory: Two-person zero sum game; Pure & Mixed strategy solution of game

Suggested Readings: -
1.Aggarwal, S.C. & R.K. Rana, Basic Mathematics for Economics, V.K. Enterprise, New Delhi
2. Allen,R.G. D., Mathematical Analysis for Economics, All India Publishers and Distributors
3. Bhardwaj, R. S., Mathematics for Economics and Business, Excel Books , New Delhi
4.Chiang, A.C.,Fundamentals of Mathematical Economics, McGraw Hill, New York.
5.Chiang, A.C. and Kevin Wainright, Fundamental Methods of Mathematical Economics, McGraw Hill
6.Dowling Edward T Introduction to Mathematical Economics,, McGraw Hill
7. IGNOU - SCP Panel of Experts, Mathematical Methods for Economics-I, Shri Chakradhar Publication (pvt.) Ltd.
8. Mehta, B.C.& G.M.K. Madnani , Mathematics for Economists , (English and Hindi Editions), Sultan Chand & Sons , New Delhi
9. Mishra, J.P. Mathematical Economics (Hindi Edition), Sahitya Bhawan Publications
10.Sydsaeter, K. and P. Hammond,Mathematics for Economic Analysis, Pearson Educational Asia , Delhi
11.Taro Yamane, Mathematics for Economics: An Elementary Survey, Prentice Hall of India Pvt. Ltd., New Delhi.

SEMESTER   I : Paper-ECN-C-102 (Core Paper)

MICRO ECONOMICS – I (CONSUMPTION, PRODUCTION and MARKETS)

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
*(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.*
*(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).*
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.*

Module I : Consumer Behaviour and Demand Analysis .
1.1 Approaches to Consumer Behaviour; Drawbacks of Marginal Utility Analysis.
1.2 Indifference Curve Analysis: Price, Income and Substitution Effect; Slutsky
Theorem; Derivation of Demand Curve.
1.3 Ordinary demand curves and Compensated demand curves (Hicks & Slutsky).
1.4 Revealed Preference Theory.
1.5 Revision of Demand Theory by Hicks.

Module II : Theory of Production & Cost
2.1 Production Function in one variable input and two variable inputs; Isoquants:
Classical and Leontief Isoquants; Properties of Classical Isoquants; Production
Function of Multiproduct firm.
2.2 Marginal & Total Product; Marginal Rate of Technical Substitution; Elasticity of
Input Substitution.
2.3 Short Run & Long Run Production Functions; Law of Variable Proportion; Laws
of Returns to Scale; Economies of Scale.
2.4 Properties of Cobb-Douglas and CES Production Function.

Module III : Cost& Revenue Functions Under Different Market Forms
3.1 Traditional Theory of Cost: Short run & Long run.
3.2 Modern Theory of Cost.
3.3 Revenue Curves: Meaning, Types & Relationship between AR and MR.
3.4 Revenue Curves of a firm under Perfect Market & Imperfect Markets; AR andMR
in Kinked Demand Curve.

Module IV : Product Market Equilibrium Under Different Market Forms.
4.1 Equilibrium of firm & industry under Perfect Competition- Short run and Long run
4.2 Monopoly Equilibrium; Price Discrimination; Monopoly Power.
4.3 Monopsony: Price and Output Determination
4.4 Bilateral Monopoly: Price and Output Determination
4.5 Monopolistic Competition: Chamberlin's Approach; Selling Cost.
4.6 Oligopoly:-Non-Collusive Models: Traditional & Kinked Demand; Collusive
Models: Cartels, Price Leadership Models.

Suggested Readings:-

1. Baumol,William, Economic Theory and OperationsAnalysis, Prentice Hall.
2. Breit, William andHarold M Hochman,Readings in Microeconomics, Holt, Rinehart and Winston Publishers.
3. Chaudhury,Kalyanjit Roy, Modern Microeconomic Theory, Pragati Publications
4. Handerson and Quandt, Microeconomic Theory: A Mathematical Approach, TMH
5. Hal, R. Varian, Intermediate Microeconomics: A modern Approach , Affiliated East West
6. Koutsoyiannis, A., Modern Microeconomics, Macmillan.
7. Landsburg, Steven E., Price Theory and Applications, (fifth edition), South Western Thomson Learning.
8.Madala G.S., Microeconomics, Pearson
9. Mankiw, N.G., Principles of Microeconomics, Thomson South-Western
10. Mukherjee,Sampat, Analytical Microeconomics, NCBA
11. NicholsonWalter, Microeconomics Theory: Basic Principles and Extensions (eighth edition), Thomson South-Western
12. Pindyck,Robert S. and Daniel L.Rubinfeld, Microeconomics (fifth edition), Prentice Hall
13.Salvatore, F., Microeconomics, Oxford
14.Samuelson, P.A (1947) , Foundation of Economics Analysis, Howard Univ. Press

SEMESTER I : Paper ECN-C-103(Core Paper)

MACRO ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.

Module I : Consumption Function
1.1 Keynes Psychological law of consumption; Income-Consumption relationship
1.2 Absolute Income, Relative Income, Life Cycle and Permanent Income Hypothesis.
1.3 Consumption and Asset Price
1.4 Consumption under Uncertainty – Modern Approach.

Module II : Investment Function
2.1 Marginal Efficiency of capital and investment – long run and short run; Factors affecting Investment Function; Derivation of MEC.
2.2 Investment Multiplier
2.3 Acceleration Principle, Investment Behaviour
2.4 Super Multiplier; Tobin's Q Theory of Investment

Module III : Macro Economic Models
3.1 Classical Macro Economic Model
3.2 Neo-Classical Macro Economic Model
3.3 Keynesian Macro Economic Model
3.4 Post-Keynesian Macro Economic Models:Rational and Adaptive Expectation Model; Mundell-Fleming Model

Module IV : Theories of Inflation
4.1 Classical, Keynesian and Monetarist approach to Inflation; Structural Theory
4.2 Inflationary Gap: Concept and factors affecting Inflationary gap; Demand-pull and Cost-push theory of Inflation.

4.3 Phillips curve analysis: Short-run and Long-run; The natural rate of unemployment Hypothesis; Tobin's Modified Philips Curve.
4.4 Control of Inflation by Monetary, Non-Monetary and Fiscal measures.

Module V : Economic Fluctuations
5.1 Business Cycle: Nature; Scope; Phases;
5.2 Monetary and Non-Monetary Theory
5.2 Traditional Theories of Business Cycle-Schumpeter's and Kaldor's
5.3 Business Cycle Theories of Hicks and Samuelson

Suggested Readings:-

1.Ackley, G (1978), Macroeconomics:Theory and Policy; Macmillan, New York
2.Blachard, Oliver (2009) Macroeconomics, Pearson.
3.Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and The Real World; (2 Volumes) Oxford University Press, London.
4.Branson, W.A. (1989), Macroeconomics Theory and Policy (3rd edition) Harper & Row, New York,
5.Dornbusch R , F Stanley and R Startz (2010) Macroeconomics, McGraw Hill
6.D'Souza, Errol (2009), Macro Economics , Pearson.
7.Hall, R.E. and J.B. Taylor (1986), Macroeconomics; W.E. Norton, New York.
8.Heijdra, B.J. and V.P. Fredrick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
9.Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
10.Mankiw, N Gregory (2010), Macroeconomics, Worth Macmillan
11.Romer, D.I. (1996) Advanced Macroeconomics, McGraw Hill Co. Ltd., New York.
12.Scarfe, B.L. (1997) Cycles, Growth and Inflation; McGraw Hill, New York.
13.Shapiro, E (1996) Macroeconomics Analysis, Galgotia Publications, New Delhi.

SEMESTER I : Paper ECN-C-104(Core Paper)

POPULATION STUDIES

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group*
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Introduction to Demography
1.1: Meaning, Subject matter, Scope and Importance of Demography
1.2: Source of Demographic data in India- Census, NFHS, NSSO, Registration
System in India; Study of Census in India- Methodology and Characteristics of
Census.
1.3: Changing Characteristics of Population in India; Population Growth rates since
Independence; Age structure; Trends and Regional variations in sex ratio; Life
expectancy.
1.4: Population Estimation and Projection; Population Pyramid; Life Table

Module II : Fertility, Nuptuality and Mortality with reference to India
2.1: Importance of study of fertility; Total Fertility Rate, Gross Reproduction rate and
Net Reproduction Rate.
2.2: Factors effecting fertility; Causes of high fertility in India
2.3: Concept of Nuptiality and it's importance; Analysis of marital status in India;
Trends in age at marriage in India.
2.4: Mortality- Death rates in India- Crude Death Rate, Age-specific Death Rate,
IMR, MMR; Factors responsible for decline in mortality in recent past.

Module III : Migration and Urbanisation.
3.1: Meaning of Migration and types- Temporary, Internal and International; In-
Migration and Out-Migration; Immigration and Emigration
3.2: Factors affecting migration; Positive and Negative Effects of In and Out
Migration.
3.3: Theories of Migration related to internal migration

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3.4: Meaning of Urbanisation; Causes of Urbanisation; Effects of Urbanisation; Trend of Urbanisation in India; Distribution of rural – urban Population in India.

Module IV : Theories of Population
4.1 : Malthusian Theory; Optimum Theory of Population.
4.2 : Theories of Demographic Transition- Views of Blackes, Marx and Cowgill.
4.3 : Biological Theories; Sociao-Economic Theories.

Module V : Population and Development with Reference to India
5.1 : Relationship between Population growth and economic development.
5.2 : Relationship between Population Growth and Environmental Degradation.
5.3 : Relationship between Population Growth and Health; Population Growth and Nutrition ; Population Growth and Productivity.
5.4 : The New Population Policy.

SuggestedReadings :-

1. Agrawala, S.N. (2018)- India's Population Problem, Tata McGraw Hill Co., Mumbai.
2. Bose, A. (1996): India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
3. Choubey, P.K. (2000)- Population Policy in India, Kanishk Publication, New Delhi.
4. Coale, A.J. and E.M. Hoover- Population Growth and Economic Development in Low Income Countries, Princeton University Press, Princeton.
5. Gulati, S.C. (1998)- Fertility in India; An Econometric Analysis of a Metropolis , Sage Publication, New Delhi.
6. Majumdar, P.K.- Fundamentals of Demography, Rawat Publications.
7. Majumdar, P.K. – India's Demography: Changing Demographic Scenario , Rawat Publication.
8. Srinivasan, K.- Basic Demographic Techniques and Applications, Sage Publications, New Delhi.
9. Sharma, Rajendra K.- Demography and Population Problems (First Edition), Atlantic Publishers

SEMESTER II : Paper- ECN-S-205(Skill Enhancement Paper)

STATISTICAL SKILLS FOR ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

Module I : Descriptive Statistics
1.1 Definition of Statistics, Uses of Statistics,
1.2 Time-Series and Cross Section Data, Quantitative and Qualitative Data, Discrete and Continuous Data, Scaling Techniques
1.3 Univariate Data Analysis: Measures of Central Tendency , Measures of Dispersion

Module II : Bivariate Statistical Analysis
2.1 Scatter Diagram; Simple Correlation: Karl Pearson's Product Moment Method; Spearman's Rank Correlation Method; Properties of correlation coefficient
2.2 Standard Error of Estimate; Probable Error of Estimate; Partial Correlation; Multiple Correlation.
2.3 Regression: Meaning; Estimation of the two Regression lines by Method of OLS.
2.4 Time Series Analysis: Importance; Components of Time Series; Estimation of Trend Value by OLS.

Module III : Probability and Probability Distributions
3.1 Classical and Empirical Definition of Probability.
2.2 Theorems of probability: Addition, Multiplication and Baye's; Application of the theorem.
3.3 Discrete and Continuous Probability Distribution.
3.4 Binomial and Poisson Distribution.
3.5 Normal Distribution; Properties of Normal Distribution; Relation between Binomial and Normal Distribution.

Module IV : Sampling
4.1 Meaning of Sampling; Population and Sample; Census vs Sampling.
4.2 Methods of Sampling; Limitations of Sampling; Errors in Sampling.
4.3 Population Distribution; Sample Distribution; Sampling Distribution.

Module V : Statistical Decision Theory
5.1 Statistical Hypothesis: Formulation; Null and Alternative Hypothesis and Level of Significance.
5.2 Testing of Hypothesis; t, F , Z tests.
5.3 $\chi2$ Goodness of fit test; Contingency Table; Degrees of Freedom.
5.4 Interpretation of Tests Results; Type I and Type II Errors.

Suggested Readings:-

1.Agarwal, B.N., Basic Statistics, New Age international Publishers
2.Chou,Y.,(1975), Statistical Analysis, Holt, Reinhart and Winston Publishers, New York
3.Gareth James, Daniela, Trevor Hastle, RobertyTibshirani, An Introduction to Statistical Learning, Springer Science and Business Media
4.Gupta,S.C., Fundamentals of Statistics, Himalaya Publishing House
5.Gupta, S.P, Statistical Methods, Sultan Chand and Sons, New Delhi
6.McClave James T., P. George, Statistics for Business and Economics (12th edition), Macmillan
7.Millar,J., (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge
8.Nigar, A.L. and R. K. Das (1993), Basic Statistics, Oxford University Press, New Delhi
9.Shah, N.M., Statistics for Economics, Arya Publications
10.Spiegel, M.R.(1992),Theory and Problems of Statistics, McGraw Hill Co. New York
11.Witte Robert and John S. Witte, Statistics (10th Edition), Wiley Publication
12.Yule,G.U. and M.G. Kendal,An Introduction to the Theory of Statistics, C, Griffin

SEMESTER II : Paper ECN-C-206(Core Paper)

MONEY AND FINANCIAL MARKETS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
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2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.

Module I : Supply of Money
1.1 Approaches Towards Determination of Money Supply- Traditional Approach, RBI Approach to Money Supply, and Recent Approaches (Friedman-Schwartz-Cagan Approach; Brunner- Meltzer Approach).
1.2 Determinants of Money Supply; High Powered Money; Money Multiplier.
1.3 Need for Control of Money supply; Quantitative and Qualitative tools to Control Money Supply
Module II : Demand For money
2.1. Classical (Quantity Theory)Approach to Demand for Money - Cash Balance Approach; Cash Transaction Approaches (Fisher and Cambridge Version).
2.2. Keynes's Demand for Money.
2.3. Post Keynesian Approach to Demand for Money: Patinkin's Real Balance Effect; Friedman's Approach.
2.4. Modern Approaches of Demand for Money: Baumol and Tobin's Portfolio Balance Approach.
Module III : Financial Markets Money and Capital market
3.1 Financial Markets- Meaning, Functions and Importance; Types of Financial Markets- Money Market, Capital Market, Commodity Markets and Derivatives Markets; Money Markets Vs Capital Markets
3.2. Structure of Money Market; Components of Money Market; Money Market Instruments; Indian Money Market- Features and Instruments;The Reforms in Indian Money Market.
3.3.Functions of Capital Markets; Component of Capital Market- Primary and Secondary Market; Capital Market Instruments- Bonds and Equity.

3.4. Types of Derivatives (Futures, Options, Forwards and Swaps); Importance of Derivatives.

3.5. SEBI and its role in Financial Markets; IRDA- Role, Objectives and Functions.

Module IV : Foreign Exchange market

4.1. Foreign Exchange Market: Meaning and Functions.

4.2. Exchange Rate Determination: Floating Exchange Rate.

4.3. Types of Foreign Exchange Market-Spot, Forward, Future, Options, Swaps; Interest Arbitrage.

4,4 Role of International Monetary Fund in Stabilising the World's Monetary system

Module V : Portfolio Analysis and Mutual Fund

5.1. Concept of Portfolio; Portfolio Management: Meaning, Attributes, Significance;Process of Portfolio Management.

5.2. Risk and Return Analysis of Portfolio: Meaning of Risk and Return; Elements of risk and return, Relationship between risk and return.

5.3 Portfolio Analysis: Types of Portfolio Risks, Diversification of Risks, Selection of Optimal Portfolio.

5.4. Venture Capital: Meaning and Features; Mutual Funds: Concept, Salient features, Types-Equity, Debt and Balanced; Exchange Traded Funds(ETFs): Concept

Suggested Readings:-

1.Ackley, G., Macroeconomics: Theory and Policy, Macmillan New York.

2.Baye, M.R. and D.W., Jansen (1996) Money Banking and Financial Market,AITBS.

3.Bhole,L.M., JitendraMahakund, Financial Institutions and Markets: Structure, Growth and Innovations, McGraw Hill.

4.Blackhouse, R, and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Volumes) Oxford University Press.

5.Branson, W.A. (1989), Macroeconomics: Theory and Policy, Harper and Row, New York.

6.Hall, J.B. and R.E.Taylor, (1993), Macroeconomics, W. E. Norton, New York.

7.Heijdra, B.J. and Frederick van der Ploeg (2001), Foundations of Modern Macroeconomics Oxford University Press, New Delhi.

8.Jha, R. (1999), Contemporary Macroeconomics: Theory and Policy, New Age International Publisher

9.Khan, M.Y.(2011), Indian Financial System Tata McGraw Hill.

10.Mishkin, F.S.and S.G.Eakins (2009), Financial Market and Institutions, Prentice Hall Publication.

11.Modigliani,F., F. J. Fabozzi F. J. , M.Ferri (2009), Foundations of Financial Markets and Institutions, Pearson.

12.Pathak,B.V., Indian Financial System, Pearson Publication

13.Romer, David (1996), Advanced Macroeconomics, McGraw Hill Co. Ltd, New York.

14.Scarfe, B.L. (1977), Cycles Growth and Inflation: A Survey of Contemporary Macrodynamics, McGraw Hill, New York.

15.Shapiro, E. (1996) Macroeconomic Analysis, Galgotia Publications Pvt Ltd, New Delhi.

16.Sinha, U. P.(2010), Monetary and Fiscal Actions in India: An Empirical Evidence, Concept Publishing Company, New Delhi

17,Sparks, Gordon R., R.Dornbusch, and Stanley Fischer (1982), Macroeconomics, McGraw Hill, New York.

SEMESTER II : Paper ECN-C-207(Core Paper)

INDIAN ECONOMY

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.

Module I : Structure of the Indian Economy
1.1: Nature of Indian Economy; India as a Developing Economy; Trends towards fastest developing economy.
1.2: Human Resource in India; Importance of Human Resource Development; New Education Policy in India; National Health Policy.
1.3: National Income of India: A Macroeconomic Overview; National Income (NNP) Trends, Per Capita National in Income; Trends in Per Capita National Income; International Comparison of major macroeconomic variables
1.4: Employment and Unemployment in India :- Structure of Employment; Employment Trend; Occupational Structure and Economic Development; Nature and extent of unemployment in India; Government Policies and Programmes for Removing Unemployment

Module II : Economic Planning and Policy
2.1: The Rationale for Planning; Evaluation of Economic Planning in India
2.2: NITI Aayog and its role in Planning in India
2.3: Regional Planning in India, Planning and Decentralization (Role of Panchayati Raj Institutions)
2.4: Economic Reforms in India:- Financial Reforms; Structural Reforms; An appraisal of NEP of 1991

ModuleIII : Agriculture Sector
3.1: Policies for Agricultural Development and Rural Development; Challenges for Indian Agriculture in present scenario of Global Economy.

University Department of Economics, Binod Bihari Mahto Koyalanchal University, Dhanbad

3.2: Trends in Agricultural Production and Productivity; Measures to increase Production and Productivity; Cropping Pattern in India; Factors determining Cropping Pattern; Contract Farming; Sustainable Agriculture

3.3: Agriculture Price Policy in India and its Evaluation; Food Security in India; Impact of Green Revolution in India; Agriculture Policy 2020

3.4: Agricultural Finance and Marketing:- Need for Agricultural Finance; Sources of Agricultural Finance and their Relative Importance; Agricultural Marketing in India and Government Measures to Improve the system of Agricultural Marketing; Globalisation and Indian Agriculture.

Module – IV : Industrial Sector and Service Sector

4.1: MSME in India; The Role and problems of Cottage Industries in Indian Economy.

4.2: New Industrial Policy and its Appraisal; Make in India; Startup India.

4.3: Performance of Public Sector in India; Problems of Public Sector Enterprises; The Disinvestment Programme in India and its Critical evaluation; Corporate Social Responsibility (CSR)

4.4: Service Sector in Indian Economy:- Growth and Contribution of Services Sector in India; Share of Services in Employment; Role of Information and Communications Technology(ICT) in Indian economy

Module –V : India and Foreign Trade

5.1: Direction and composition of India's Foreign Trade; Recent Trends of Balance of Payments of India.

5.2: Objectives of EXIM Policy; New Trade Policy (EXIM Policy); FERA; FEMA.

5.3: FDI and FII; Composition of India's Foreign Capital; Indian Government Policy towards Foreign Capital; Foreign Investment Inflows, India's External Debt.

5.4: Meaning of Globalisation; Impact of Globlisation on the Indian Economy.

Suggested Readings:-
1. Ahluwalia I.J. and I.M.D. Little, India's Economic Reforms and Development, Oxford University Press
2. Bawa, R.S. and Raikhy, P.S. (Ed.), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.
3. Bhagawati, J. and Arvind Panagariya (Eds.), Reforms and Economic Transformation in India, Oxford University Press
4. Datt and Sundharam, Indian Economy, S. Chand Publishers
5, Datt G. and Ashwani Mahajan, Indian Economy, S. Chand Publishers
6. Economic Survey (Govt. of India Publication), (Recent Issues)
7. Goyal Ashima, A Concise Handbook of Indian Economy in the 21st Century;OUP
8. Kapila, Uma, Indian Economy Since Independence (Latest Edition), Academic Foundation Press
9. Mishra, S.K. and V.K.Puri, Indian Economy, (Latest Edition), Himalaya Publishing House, New Delhi.
10. RBI Bulletin on Indian Economy(Related Issues)
11. Sankarganesh Karuppiah, Indian Economy-Key Concepts, MacGraw Hill
12.Singh,Ramesh, Indian Economy, MacGraw Hill
13.Uma Kapila, Indian Economy: Performance and Policies, Academic Foundation, 2009

SEMESTER II : Paper ECN-C-208 (Core Paper)

ECONOMICS OF GROWTH AND DEVELOPMENT

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Economic Development and Economic Growth
1.1: Meaning of Development, Broad Objectives of Development, Significance of
Economic Development; Meaning and Measure of Economic Growth
1.2: Sustainable Development: - Introduction, Meaning, Objectives, Methods or
Conditions for sustainable Development
1.3: Main Obstacle to Economic Development: - Vicious Circle of Capital
Development, Market Imperfections etc.
1.4: Modern Version of Economic Growth; Features of Modern Economic Growth.

Module II : Theories of Economic Development
2.1: The Classical Theory of Development :- Introduction; Adam Smith Theory of
Development, The Ricardian Theory of Development, Mill's Theory of Development,
Relevance of Classical Model.
2.2: Marxian Theory of development, Marxian Theory and UDCs.
2.3: Schumpeter's Theory:- Circular Flow ; Innovation; Role of Entrepreneur; Role of
Profit; Braking the Circular Flow; Cyclical process; Decay of capitalism; Mathematical
Interpretation.
2.4: Harris and Todaro on Migration and Development- Introduction, Purpose of the
Model, Implications for Development Policy

Module III : Models of Economic Growth-I
3.1: Mrs. Joan Robinson's growth model
3.2: A.K. Sen's Growth model
3.3: Technological progress- embodied and disembodied
3.4: Growth model of Hicks and Golden Rule of accumulation

Module IV : Models of Economic Growth –II
4.1 The doctrine of Balanced and Unbalanced Growth
4.2: Unlimited Supply of Labours; Fei and Ranis model, Big Push Theory.
4.3: Jorgenson's Neo-Classical Model of Rural Economy.

Suggested Readings:-

1. Adelman, I (1961): Theories of Economic growth and Development, Stanford University Press, Stanford.
2.Higgins,Benjamin, Economic Development: Principles, Problems and Policies, Central Book Depot
3. KindlebergerC.P.: Economic Development, MacGraw Hill
4. LekhiR.K. and Joginder Singh: The Economics of Development and Planning, Lewis, Arthur, The Theory of Economic Growth, D R Irwing
5. MeierG.M.: Leading Issues in Economic Development, Oxford
6. Ray, Debraj, Development Economics, Oxford University Press.
Kalyani Publishers.
7. Thiriwall. A.P: Growth and Development, Macmillan
8.Todaro, MichaelP. and Stephen C.Smith, Economic Development, Pearson Publication
9. World Bank- World Development Report (Various Issues)

SEMESTER III : Paper 309 - OPEN CHOICE BASED ELECTIVE PAPER

Students of M.A. Economics must select a subject of their choice from another Discipline and study the syllabus of paper 309 of that subject.

Students of other Disciplines who wish to keep Economics as their Choice Based Elective Subject must follow the Syllabus given below.

FUNDAMENTALS OF ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.

OPEN ELECTIVE (For Students of Masters in other Disciplines)

FUNDAMENTALS OF ECONOMICS

UNIT – I MICRO ECONOMICS
1.1 Law of Diminishing Marginal Utility , Demand & Law of Demand , Elasticity of Demand ; Consumer's Surplus.
1.2 Factors of Production ; Law of Variable Proportion.
1.3 Price Determination in Industry under Perfect Competition.

UNIT – II MACRO ECONOMICS
1.1 Concept of GDP, NDP, GNP and NNP ; Measurement of National Income.
1.2 Inflation : Meaning and Measures of control.
1.3 Macro Economic Policy – Objectives and Instruments.

UNIT – III PUBLIC FINANCE
3.1 Tools of Public Finance – Taxation, Expenditure & Debt; Effects of Taxation on Production, Consumption and Investment.
3.2 Sources of Government Revenue – Tax & Non-Tax; Direct & Indirect Tax; GST.
3.3 Fiscal Policy – Objectives & Tools.

UNIT – IV INTERNATIONAL TRADE
4.1 Theory of Comparative Cost Advantage
4.2 Balance of Payment: Components; Measures to correct Disequilibrium.
4.3 Function of IMF & World Bank.

UNIT – V GROWTH AND DEVELOPMENT
5.1 Difference between Economic Growth and Economic development.
5.2 Development Indices and India's Position – HDI, GDI, MPI, HPI–1, HPI-2.

UNIT – VI INDIAN ECONOMY
6.1 Demographic traits of Indian Population.
6.2 Importance of Agriculture in India.
6.3 Problems of Industrialisation in India.
6.4 Major problems of Indian Economy- Poverty, Inequality, Unemployment- Their meaning and extent in India

Suggested Readings: -
1.Bhatia, H L, Public Finance, Vikas Publishing House
2. Datt and Sundharam, Indian Economy, S. Chand Publishers
3. Hal, R. Varian, Intermediate Microeconomics: A modern Approach , Affiliated East West.
4. H.L.Ahuja, Principle Of Micro Economics, S.Chand.
5. Koutsoyiannis, A., Modern Microeconomics, Macmillan.
6. M.L.Jhingan, Microeconomics, Vrinda Publications (P) LTD.
7. M.L.Jhingan, Money, Banking, International Trade and Public Finance, Vrinda Publications (P) LTD.
8. Mishra, S.K. and V.K.Puri, Indian Economy, (Latest Edition), Himalaya Publishing House, New Delhi.
9.Shapiro, E. (1996) Macroeconomic Analysis, Galgotia Publications Pvt Ltd, New Delhi.
10.Salvatore, International Economics, Wiley India.
11.Tyagi, B.P., Public Finance, Jai Prakash Nath and Co.
12.Todaro, MichaelP. and Stephen C.Smith, Economic Development, Pearson Publication

SEMESTER III : Paper ECN-C- 310 (Core Paper)

MICRO ECONOMICS– II(FACTOR PRICING, ALTERNATIVE THEORIES OF FIRMS AND WELFARE ECONOMICS)

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

Module I : Pricing of Factors
1.1 Micro Theory of Distribution- Marginal Productivity theory of distribution
1.2 Product Exhaustion Theorem – Euler's & Clark's Version.
1.3 Modern Theory of Distribution.
1.4 Modern Theory of Rent; Classical & Modern Theory of Wage; Keynesian and Modern Theory of Interest ; Theories of Profit – Risk Theory, Uncertainty Theory & Innovation Theory.
1.5 Macro Theories of Distribution of Ricardo, Marx, Kalecki& Kaldor.

Module II : Alternative Theories of Optimisation of Firms
2.1 Critical Evaluation of Marginal Analysis of Optimisation of Firms.
2.2 Baumol's Sales Revenue Maximisation Module.
2.3 Williamson's Model of Managerial Discretion.
2.4 Marris Model of Managerial Enterprise.
2.5 Hall & Hitch Full cost Pricing.
2.6 Behaviour Model of Cyert& March.
2.7 Game Theory Model.

Module III : Classical and Neo-Classical Views on Welfare Economics
3.1 Definition and Scope of Welfare Economics.
3.2 Pigou's Welfare Economics.
3.3 Pareto Improvement and Pareto Optimality through Contract Curve and through Production / Utility Frontiers; Pareto optimum in Production; Optimum in Consumption; Optimum in Exchange; Limitations of Pareto Optimality

Module IV : Modern Theories on Welfare.
4.1 Compensation Criteria – Kaldor,Hicks&Scitovsky
4.2 Bergson – Samuelson Social Welfare Function.
4.3 Arrow's Impossibility Theorem.
4.4 Theory of h the Second Best
4.4 A.K. Sen's and Abhijit Banerjee's Views on Welfare.

Module V : Market Equilibrium
5.1 Partial and General Equilibrium
5.2 Existence, Stability and Uniqueness of Equilibrium.
5.3 Walras General Equilibrium Model.
5.4 Input-Output Approach to General Equilibrium.

Suggested Readings:-
1, Arrow, K.J. (1951) , Social Choices and Individual Values, Yale Univ. Press.
2. Baumol, Economic theory and Operation analysis, Prentice Hall.
3. Breit, William and Hochman, Harold M, Reading in Microeconomics, Rinehart and Winston Inc.
4. Graff, J De V, Theoretical Welfare Economics, Vikas.
5. G.S Madala , Microeconomics, Pearson
6. Hal R Varian- Intermediate Microeconomics: A modern Approach, Affiliated East West
7.Handerson and Quandt, Microeconomic Theory: A Mathematical Approach, TMH
8.Kalyan jit Roy Chaudhury, Modern Microeconomic Theory, Pragati Publications
9. Koutsoyiannis A, Modern Microeconomics, Macmillan.
10. Pigou, A.C. (1962), Economics of Welfare (4th Edition) Mac Milan.
11. Robert S Pindyck and Daniel L Rubinfeld, Microeconomics (fifth edition), Prentice Hall.
12.Salvatore, Microeconomics, Oxford
13.Sampat Mukherjee, Analytical Microeconomics, NCBA
14. Samuelson, P.A (1947), Foundation of Economics Analysis, Howard Univ. Press
15.Sen Amartya, Choice, Welfare and Measurement, Oxford
16. Steven E Landsburg, Price Theory and Applications, (fifth edition), South Western Thomson Learning.
17. Walter Nicholson, Microeconomics Theory: Basic Principles and Extensions (eighth edition), South Western Thomson Learning.

SEMESTER III : Paper ECN-C- 311 (Core Paper)

PUBLIC ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered

Module I : Economic Basis of Public Activity
1.1 Market failure and Rationale for Government Intervention; Externality and Government Policy
1.2 Provision for Private goods, Public Goods, Social Goods, Merit Goods and Mixed Goods; Pure and Impure Public Goods;
1.3 Public Sector Pricing
1.4 Public Economic policies: allocation, distribution and stabilisation; Conflicts among the Public Economic Policies

Module II : Public Expenditure
2.1 Pure Theories of Public Expenditure- Samuelson and Buchanan's contributions; Effects of Public Expenditure on Production, Distribution and Economic Stability.
2.2 Theories of the Growth of Public Expenditure: Wagner's law of Increasing State Activities; Wiseman-Peacock Hypothesis.
2.3 Structure of Public Expenditure and Growth of Public expenditure in India
2.4 Budgeting Systems-Performance Budgeting; Program Planning Budgeting System and Zero-Based budgeting; Cost-Benefit Analysis of Public Expenditure

Module III : Taxation
3.1 Benefit Principle of Taxation; Ability to Pay approach to Taxation; Theory of Optimal Taxation
3.2 Theory of Incidence: Dalton's and Musgrave's Concepts of Incidence; Taxable Capacity; Tax Effort; Tax Neutrality; Meaning of Elasticity of and Buoyancy of Tax
3,3 Classifications of Taxes: Direct and Indirect Taxes, Proportional, Progressive, Regressive and Digressive Taxation; Demarco's views; Ad-valorem and Specific Duties.

3.4 Indian Tax System; Sources of Revenue of the Union, States and Local Bodies; Major Direct and Indirect Taxes in India.

Module IV : Public Debt

4.1 Classical view of Public Debt; Compensatory aspect of Debt Policy

4.2 Sources of Public Debt; Burden of Public Debt;

4.3 Public Debt and Economic Growth; Public Debt and Inflation, Public debt as a means of Regulating Economy

4.4 Principles of Debt Management and Repayment.

Module V : Fiscal and Monetary Policy

5.1 Objectives of Fiscal Policy and Instruments to achieve them: Full employment, Price Stability, Economic Growth, Redistribution of Income and Wealth, Social Security; Fiscal Policies in Underdeveloped Countries

5.2 Interdependence of Fiscal and Monetary policies.

5.3 Budgetary Deficits, Fiscal Deficit, Revenue Deficit and Monetary Deficit its implications.

5I.4 Fiscal Policy for stabilization; Automatic V/s Discretionary stabilization

Module VI : Fiscal Federation in India.

6.1 State-Centre Financial Relation in Indian Union Budget, Expenditure Pattern.

6.2 Indian Tax System; Sources of Revenue of the Union, State and Local bodies; Major Taxes in India.

6.3 VAT; GST; and Fiscal Federation; Role of Finance Commission.

6.4 Fiscal Crisis and Major Fiscal Sector Reforms in India; FRBM Act

Suggested Readings: -

1.Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics,TMH,

2.Auerbach, A.J., R. Chetty and M. Feldstein (Eds) (2013)Vol 5. Handbook of Public Economics, North Holland Amsterdam.

3.Bhatia, H L, Public Finance, Vikas Publishing House

4.Buchanan, J.M. (1970)The Public Finance,

5.Chelliah, Raja, Fiscal Policy in Underdeveloped Countries with Special Reference to India, Routledge Publications

6.Hendricks, J.,G. Myles (2006),Intermediate Public Economics, MIT Press.

7.Jha, Raghbendra (1987), Modern Theory of Public Finance, Wiley Eastern, N Delhi

8.McNutt, P., 1996), The Economics of Public Choice, Edward Elgar, U.K.

9.Musgrave, R.A. (1959), The Theory of Public Finance, McGraw Hill, New York

10.Musgrave and Musgrave (1989), Public Finance:Theory and practice, TMH

11.Prest, A.R. (1975), Public Finance in Theory and Practice; Weidenfeld and Nicholson, London

12.Rangarajan and D.K.Srivastava (2005), Fiscal Deficit and Govt. Debt, EPW, 29-Feb 2020

13. Rao, Hemlata, Fiscal Federalism: Issues and Policies, New Century Publications, N. Delhi

14.Rao,M. Govind (2011), A Study of Budgets, RBI (Latest)

15.Rosen, H., T. Gayer (2009), Public Finance, McGraw Hill

16.Singh S.K., 1982), Public Finance in Developed and Developing countries, S. Chand & Co.

17.Shome, P. (Ed.) Tax Policy, Handbook, Tax Division, Fiscal Affair Development, IMF, Washington D.C.

18.Singh, S.K., Public Finance in Theory and Practice, Chand Pub.

19.Sunderam, K.P.M., and K.K. Andley, Public Finance, S. Chand

20.Tyagi, B.P., Public Finance, Jai Prakash Nath and Co.

SEMESTER III : Paper ECN-C- 312 (Core Paper)

INTERNATIONAL ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Theory of International Trade
1.1: Theory of Comparative Cost Advantage; Theory of Opportunity Cost
1.2: Hecksher-Ohlin Theory of trade; Leontief Paradox
1.3: Rybczynski Theorem; Stopler-Samuelson Theorem
1.4: Modern Theories of Trade: The Kravis Theory of Availability; Posner's Imitation
gap or Technological Gap Theory; Vernon's Product cycle Theory

Module II : Terms of Trade and Gains from Trade
2.1: Concept of Terms of Trade; Factors affecting Terms of Trade; Technical
Progress and Terms of Trade.
2.2: Meaning of Gains from Trade; Measurement of Gains from Trade.

Module III : Exchange Rate
3.1: Concept of Foreign Exchange Rate; Fixed and Flexible Exchange Rate.
3.2: Theories of Exchange Rate Determination- Purchasing Power Parity; Demand
and Supply Theory of Exchange rate determination; Exchange Control.
3.3: Convertibility of Currency; Devolution and its impact on economy

Module IV : Balance of Trade and Balance of Payment
4.1: Meaning and Components of Balance of Trade and Balance of Payments;
Equilibrium and Disequilibrium of Balance of Payments.
4.2: Factors Causing disequilibrium in Balance of Payments; Correction of
disequilibrium in BOP
4.3: Theories of Balance of Payment: Monetary and Absorption Theory; Elasticity
Approach.

Module V : Theories of Regional Blocks

5.1: Meaning and Importance of Economic Cooperation; Custom Union, Free Trade Areas, Common Markets.

5.2:Types of Foreign Aid; Role of Foreign Aid in Economic Development.

5.3: The International Debt Problems; The Debt Crisis; Measures to solve the Debt Crisis

Suggested Readings:-

1. Bhagawati, J.N.(ed), International trade, Selected Readings, Cambridge University Press.

2.Cherunilam, F, International Economics, TMH

3. Kindleburger, International Business, RD Irwin Publications

4. Kenen, P.B. , International Economy, Cambridge University Press, London

5. Paul R Krugman , Maurice Obstfeld , International Economics, Theory and Practice (Person)

6.Salvatore, International Economics, Wiley India

7. Soderston, B.O.(1991), International Economics, Macmillan Press.

8.Soderston, B O and Geoffrey Reed, International Economics, Macmillan Press

SEMESTER IV: -
Note:In Semester IV, Students must select one of the three Elective Papers offered in 413(ie ECN-E-413A/ ECN-E-413B/ ECN-E-413C) and one of the three Elective Papers offered in 414 (ieECN-E-414A/ ECN-E-414B/ ECN-E-414C). Paper 415 is compulsory and 416 is a compulsory Dissertation Paper.

SEMESTERIV- Paper ECN-E-413A (Elective Paper)

ADVANCED MATHEMATICAL ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

Module I : Theoryof Optimisation and Market Equilibrium
1.1 Conditions for Relative maximum and minimum values; Extreme values– one variable & 2 Variable Case; Quadratic Forms; Concavity & Convexity of functions
1.2 Optimisation with Equality Constraints- Lagrange and Total Differential methods; First & Second Order Condition.
1.3 Market Equilibrium – Single Market equilibrium; Existence, Uniqueness & Stability of Equilibrium, Marshallian &Walrasian Equilibrium.

Module II : Optimisation in Micro Economics
2.1 Constrained Utility Maximisation – Cardinal & Ordinal; Slutsky Equation; Compensated and Normal Demand functions; Indirect Utility function and Duality Theorem
2.2 Derivation of Short Run & Long Run Cost function of firm; Input demand function; Constrained optimisation of a Producer; Expansion path of a firm.
2.3 Homogeneous Production function; Properties of Cobb- Douglas & Constant Elasticity of Substitution elasticity of Production Function; Euler's Theorem; Production Possibility Curve.

Module III : Growth Models and Fluctuations

3.1 Solution of first and second order of Difference equations and their Economic Applications

3.2 General and Particular solutions of first and second order Differential equations; Complex numbers and Complex Roots; Interpretation of Solutions – Damped / Explosive / Regular; Oscillating / Continuous

3.3 Simple Continuous Cobweb Model (Supply lags and Demand lags); Model with stocks.

3.4 Determination of Income and Fluctuations in Income. – Classical and Keynesian Macro system; Static and Dynamic Multiplier.

3.5 Trade Cycle Model of Samuelson and Hicks; Growth Model of Harrod–Domar.

Module IV : Application of Matrices

4.1 Solution of Non – homogeneous and homogeneous equation system; Characteristic roots & Vectors; Orthogonal & Idempotent Matrices; Quadratic forms

4.2 Linear Programming: Graphic & Simplex Method of Solution; Duality Theorem; Formulation of dual and Solution of Primal via Dual; Economic Interpretation of Dual.

4.3 Game Theory: Assumptions and Limitations of Game Theory; Solution using Pure and Mixed strategy- Graphic method, Equation method, Linear Programming method; Nash Equilibrium; Prisoner's Dilemma.

4.4 Input-Output Analysis: Open and Closed Models; Static and Dynamic Models; Simon- Hawkins Condition; General Solution for 3 Industries.

Suggested Readings :-

1. Aggarwal, S.C. & R.K. Rana – Basic Mathematics for Economics, V.K. Enterprise, New Delhi.
2. Allen, R G D,Mathematical Analysis for Economics, AITBS Publication
3. Allen, R G D, Mathematical Economics, ELBS and Macmillan Press.
4.Baumol, W. J., Economic Theory and Operations Research, PHI
5. Chiang, A.C., Fundamentals of Mathematical Economics, McGraw Hill, New York.
6.Hadley G, Linear Programming, Oxford
7.Handerson, J.H. and R.E. Quandt, Microeconomic Theory: A Mathematical Approach, McGraw Hill
8.Intriligator, Michael D., Mathematical Optimisation and Economic Theory, (SIAM Edition) PHI
9. Rowcraft, J.E., Mathematical Economics: An Integrated Approach, Prentice Hall
10.Silberg, E. and W. Suen, The Structure of Economics: A Mathematical Analysis, McGraw Hill
11. Taro Yamane,Mathematics for Economics: An Elementary Survey Prentice Hall of India, Pvt. Ltd. New Delhi.

SEMESTER IV : Paper ECN-E-413B (Elective Paper)

PRINCIPLES OF AGRICULTURAL ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Agriculture and Economic Development
1.1 Nature and Scope of Agricultural and Rural Economics; Traditional Agriculture
and its modernization
1.2 Role of Agriculture in Economic Development; Sustainable Agriculture
1.3 Interdependence between Agriculture and Industry; Some empirical Evidence.

Module II : Models of Agricultural Development
2.1 Schultz Theory of Transformation of Traditional Agriculture.
2.2 Lewis Theory of Unlimited Supply of Labour.
2.3 Fei and Ranis Models of Agricultural Surplus.
2.4 Mellor's three-phase Theory of agricultural development.

Module III : Agricultural Production and Productivity
3.1 Agricultural Production: Resource use and Efficiency in resource use; Production
function analysis in Agriculture.
3.2 Factor combination and Resources substitution; Costs and Supply curves of farm
produce
3.3 Size of Farms and Laws of Returns – theoretical relationships; imperial findings
3.4 Resources useefficiency in traditional agriculture; Technical change;
Feminization of Agriculture.

Module IV : Agricultural Marketing and Prices
4.1 Marketing and State Policy for Marketing, Warehousing and Pricing; Agriculture
Market and Marketing Efficiency; Marketing Function and cost.

4.2 Market Structure and Imperfection; Regulated Markets; Marketed and Marketable Surplus.

4.3 Behaviour of Agricultural Prices; Cobweb Model; Effects of Fluctuations in Agricultural Prices; Need for Stability in Agricultural Prices.

4.4 Terms of Trade between Agricultural and Non-Agricultural Prices; Need for State intervention.

Module V : Rural Economy

5.1 Problems of Rural Economy – Economic, Finance Related, Infrastructure Related, Agriculture Related, Demography Related.

5.2 Rural Labour Supply; Interlocking Of Factor Markets; Mobility Of Rural Labour; Marginalization Of Rural Labour.

5.3 Land Tenures And Farming Systems – Peasant, Capitalist, Collective And State Farming; Tenancy And Crop Sharing Forms.

5.4 Wage Determination – Minimum Wage, Leaving Wage and Fair Wage; Classical and Modern Theory Of Wage Determination.

5.5 Non-Agricultural Rural Employment, its Determinants.

Suggested Readings:-

1. Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
2. Bilgrami, S.A.R. (1996), Agricultural Economics, Himalayan Publishing House, Delhi.
3. Dantwala, M.L. et al. (1991), Indian Agricultural Development Since Independence, Oxford and IBH, New Delhi.
4. Government of India (1976), Report of National Commission on Agriculture, New Delhi.
5. Government of India, Economic Survey (Various Annual Issues).
6. Kahlon,A.S. and D.S. Tyagi (1989) Agricultural Price Policy in India, Allied Publishers, Bombay
7. Lekhi, R. K. and Joginder Singh, Agricultural Economics, An Indian Perspective, Kalyani Publication.
8. Ramachandran V.K. and Madhura Swaminathan,(Eds.) Agrarian Studies: Essays on Agrarian Relations in Less Developed Countries,Tulika Books, New Delhi
9. Ramachandran V.K. and Madhura Swaminathan,(Eds.) Agrarian transition in the Past and Contemporary World, ZED Books Ltd, London
10. Saini G.R.(1971) Farm Size, Resource Use Efficiency and Income Distribution; Allied Publishers, New Delhi
11. Utsa Patnaik, Agrarian Relations and Accumulation: The Mode Of Production in Indian agriculture,Oxford University Press for Sameeksha Trust, New Delhi.

SEMESTER   IV : Paper ECN-E-413C   (Elective Paper)

INDUSTRIAL ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group*
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Framework of Industrial Economics
1.1: Meaning of Industrial Economics; Subject matter and Its Nature; Importance of
the Study of Industrial Economics
1.2: Concept of Firm; Organisation of a Firm; Classification of Firms on the basis of
Ownership (Public, Private, Joint and Cooperative Sectors)
1.3: Location of Industries- Weber's Theory of Industrial Location; Sargent Florence
Theory of Location of Industry.

Module II : Industrial Productivity and Finance
2.1: Meaning of Industrial Productivity; Factors affecting Industrial Productivity,
Measurement of Industrial Productivity; Importance of Industrial Productivity
2.2: National Production Movement in India
2.3: Industrial Finance – Components, Sources of Industrial Finance; Role of Major
Funding agencies like IDBI, SIDBI, IFCI, SFCs and Commercial Banks for Industrial
development in India.

Module III : India's Industrial Growth and Pattern
3.1: New Industrial Policy in India and its evaluation
3.2: Role of Public and Private Sector
3.3: Recent trends in Industrial growth; Regional Industrial growth in India.
3.4: Role of MNCs in India

Module IV : Problems of Industrial Economics
4.1: Industrial Sickness- Definition, Causes and Remedial Measures.
4.2: MSME - Basis of classification; Role in India; Problems of MSME in India

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4.3: Industrial Proliferation and Environmental Protection
4.4: Industrial Disputes- Causes and their Settlement and Prevention

Suggested Readings: -
1. Ahluwalia, I.J. (1985): Industrial Growth in India, Oxford University Press, New Delhi.
2. Barthwal, R.R. (1985): Industrial Economics, Wiley Eastern Ltd, New Delhi.
3. Cherunilam, F. (1940): Industrial Economics, Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
4. Desai, B.(1999): Industrial Economy in India, Himalaya Publishing House, Mumbai.
5. Divine, P.J. and R.M. Joneset (1976): An Introduction to Industrial Economics, George allen and Unwin Ltd., London
6. Hay, D. and D.J. Morris (1979): Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
7. Kulshreshta, R.S.,(2015), AudhyogicArthshashtra (H), Sahitya Bhawan, Agra
8. Singh, A. and Sadhu, A.N. (1988) Industrial Economics, Himalaya Publishing House, Mumbai.

SEMESTER IV : Paper ECN-E-414A (Elective Paper)

ADVANCED ECONOMETRICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

MODULE I : Basics of Econometrics :
1.1 Nature , Meaning and Scope of Econometrics; Methodology of Econometric analysis.
1.2 The Simple linear regression and General linear regression model
1.3 Assumptions , Estimation and Properties of OLS Estimates ; Gauss Markov Theorem; Concept and Derivation of R^2 and adjusted R^2.
1.4 Testing and inference in 2 variable OLS, t- test, ANOVA and F test, Level of Significance; Confidence intervals for coefficients; Goodness of fit; Emperical applications.

MODULE II : Problems in Regression Analysis:
2.1 Nature , Tests , Consequences and Remedial steps of :- Heteroscedasticity, Multicollinearity and Auto-Correlation
2.2 Problems of Specification error ; Errors of Measurement .

MODULE III : Regression with Qualitative Independent Variables and Dummy Variables:
3.1. Dummy Variables: Definition, Single Regression Model with Dummy Variable; Dummy Variables for Multiple Categories.
3.2 Models with Dummy Dependent Variables: Binary Choice Model; Linear Probability Model (LPM), Logit Model, Probit and Tobit Models
3.3 Seasonality Analysis and Trend forecast using Multiple Regression ; Piecewise linear regression

MODULE IV : Dynamic Econometric Models:
4.1 Auto-Regressive and Distributed Lag Models - KOYCK Model , Partial Adjustment Model (PAM); Adaptive Expectations
4.2 ARIMA Modeling (Autoregressive Integrated Moving Average- AR, MA and ARMA); Vector Auto-Regressive Model (VAR) and Granger Causality test.
4.3 Time Series: Basic Characteristics; Stationarity in time series; Unit Root Test and Dickey Fuller Test
4.4 Spurious Regression and Co-Integration in Time Series

MODULE V : Simultaneous Equation Models :
4.1 Simultaneous Equation Bias; The Identification Problem; A test of Simultaneity; Consequences of ignoring Simultaneity
4.2 Simultaneous equation (Methods of estimation); Structural and Reduced form Model , Rank and Order Conditions of Identification.
4.3 Two-Stage Least Square (2SLS)Method. Estimation of an exactly identified equation- Indirect Least Square (ILS).

Suggested Readings:-
1.Amemiya, T. (1985) : Advanced Econometrics , Haward Univ. Press, Cambridge
2.Cameron, C. and Trivedi P. (2005): Micro Econometrics, Cambridge: Cambridge Univ. Press.
3.Davidson and MacKinnon (2004). Econometric Theory and Methods, Oxford University Press.
4.Goldberger (1991). A Course in Econometrics. Harvard University Press.
5.Greene (2003). Econometric Analysis. 5thedition, Prentice Hall.
6.Gujarati, D.N. (1995) : Basic Econometrics, 2nd Edition McGraw Hill, New Delhi.
7.Gujarati, D.N., Dawn, C. Porter & Sangeetha Gunasekar . (2012) : Basic Econometrics (5th Edition) Tata McGraw Hill Education Pvt. Ltd., New Delhi.
8.Johnston and Di-Nardo (1997). Econometric Methods. 4thedition, McGraw-Hill.
9,Koutsoyiannis. A. (1977) : Theory of Econometrics, 2nd Edition The McMillan Press Ltd. London.
10.Krishna, K.L. (Ed) (1997) : Econometric Application in India, Oxford Univ. Press, New Delhi
11.Maddala, G.S.(Ed) (1993) : Econometric Methods and Applications (2 Vols) Aldershot, UK.
12.Maddala (1982). Limited-dependent and Qualitative Variables in Econometrics. Cambridge University Press.
13.Wooldridge, J.M (2002). Econometric Analysis of Cross Section and Panel Data. MIT
Press.

SEMESTER IV : Paper ECN-E-414B (Elective Paper)

INDIAN AGRICULTURE

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two"
shall be applicable for computation of marks for SIA).There will be two groups of
questions in each written examination of 20 marks. Group A shall be compulsory and
will contain five multiple choice type questions consisting of 1 mark each. Group B
will contain five descriptive type questions of five marks each, out of which any three
are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80,
2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group
A is compulsory and will contain two questions. Question No.1(a)will contain six
multiple-choice type questions of1 mark each. Question No. 1(b)will contain two
short answer type questions of 4 marks. Group B will contain eight descriptive type
questions of fourteen marks each, out of which any four are to be answered.

Module I : Diversification of Rural Economic Activities.
1.1   Diversification of Indian Agriculture: Meaning, Objectives, Problems and
Prospects.
1.2 Dimensions of Diversification: Livestock Economics- Livestock Resource and
their Productivity,Problems of Marketing of Livestock and their Produce.
1.3 Fishery, Forestry, Horticulture and Floriculture in India- Status, Problems and
Prospects.
1.4 Issues and Problems in Rural Industrialization and Development of Agro-based
Industries, Rural Non-Farm Sector (RNFS) uses and challenges.

Module II : Agriculture and Rural Finance in India.
2.1 Need of Agriculture Finance; Role of Capital and Rural Credit, Rural Saving and
Capital Formation.
2.2 Characteristics and Source of Rural Credit, institutional and Non-Institutional
reorganisation of Rural Credit, Cooperative, Commercial Banks, Regional Rural
Bank.
2.3 Role of NABARD.

Module III : Agricultural Marketing and Pricing in India.
3.1 Role of Agricultural Marketing in Economic Development; Present System and
Problems of Agricultural Marketing in India; Measures taken by Government to
eradicate the problem of Agricultural Marketing.
3.2 Regulated Markets and Cooperative Markets, Forward Marketing.

3.3 Agricultural Price Commission; Objectives and Important Constituents of Agricultural Price Policy in India; Taxation on Agricultural Income; Crop Insurance. Economic Reforms and Agricultural Price Policy in India.
3.4 Food Security in India and Public Distribution System, New Price Policy.

Module IV : Land Reforms and Land Policy in India
4.1 Land Reforms and Land Policy; Land reform Measures and Performance, Recent changes in Land Policies.
4.2 Land Utilization, Land Distribution Structure and Trends, Land Tenures and Farming System, Collective and State Farming.
4.3 Co-operative Movement in India, Genesis and Growth of Co-operative Sector.
4.4 Problems and Prospect of Co-operative Institutions, Women and Land Reforms, Problem of Small and Marginal Farmers.

Module V : Agricultural Growth in Indian and Agricultural and External Sector.
5.1 Cropping Patterns and Crop Shifting.
5.2 Distribution of gains from Technological Change, Role of Public Investment and Capital formation in Indian Agricultural Development.
5.3 Economic Development and Declining importance of Agriculture, Need of Second Green Revolution, Climate Changes and its Impact.
5.4 International Trade in Agricultural Commodities, Role of MNCs , Impact of World Trade Organisation on Indian Agriculture, Globalization of Indian Economy and Problem and Prospect of Indian Agriculture.

Suggested Readings :-

1. Bhaduri, A. (1983), The Economic Structure of Backward Agriculture, Macmillan, Delhi, (ISBN : 0120954206, 9780120954209).
2. Bilgrami, S.A.R. (2017), An Introduction To Agricultural Economics, Himalayan Publishing House, Delhi, (ISBN : 9352020340, 9789352020348).
3. Dantwala, M.L. et al. (1991), Indian Agricultural Development Since Independence, Oxford and IBH, New Delhi, (ISBN-10: 8120401182, ISBN-13: 978-8120401181).
4. R.K Lekhi and Joginder Singh , Agricultural Economics : An Indian Perspective , Kalyani Publication, (ISBN : 9789327267068 , 9327267060).
5.Government of India (1976), Report of National Commission on Agriculture, N.Delhi.
6. Government of India, Economic Survey (Annual).
7. Joshi, P.C. (1975) Land Reforms in India: Trends and Prospects, Allied Publishers, Bombay.
8. Kahlon,A.S. and D.S. Tyagi (1989) Agriculture Price Policy in India, Allied Publisher, Bombay, (ISBN: 8170232643, 9788170232643).
9. Rao, C.H Hanumantha (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.
10. Rudra, A. (1982), Indian Agricultural Economics: Myths and Reality, Allied Publisher, New Delhi.
11. Datt, G.(1996), Bargaining Power, Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
12. Hajela, P.d. (1998), Labour Reconstructing in India : A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.

SEMESTER IV : Paper ECN-E-414C (Elective Paper)

LABOUR ECONOMICS

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.

Module I : Labour Economics and Labour Problems
1.1: Definition, Nature, Scope, and Importance of Labour Economics
1.2: Nature and Problems of Labour
1.3: Labour Market and Analysis of Labour Demand and Supply; Labour Market in India; Industrial Labour Organisation (ILO)

Module II : Industrial Labour in India
2.1: Industrial Labour: Meaning and Scope; Characteristics of Industrial Labour in India
2.2: Trade Union : Meaning and Objectives; Trade Union movement in India, Measures to Strengthen the Trade Union Movement in India.
2.3: Industrial disputes: Meaning , Causes and Effects of Industrial disputes; Prevention of Industrial disputes and Settlement of disputes with reference to India.
2.4: Labour Legislation in India.

Module III : Wage
3.1: Theories of Wage determination: Classical, Neo-Classical and Bargaining Theories
3.2: Wage and Methods of Wage Payment; Types of Wage: Fair Wage, Living Wage and Minimum Wage.
3.3: Need for State Regulation of Wages; National Wage Policy; Wage Board in India.
3.4: Components of Labour Remuneration; Profit Sharing; Bonus.

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Module IV : Social Security and Social Welfare Measures for Labour in India
4.1: Concept of Social Security; Social assistance and Social Insurance; Need for Social Security Insurance in India; Programs for Social Security in India
4.2: Labour Welfare in India- Special Problems of Labour: Female Labour, Child Labour; Legislative Provisions to Safeguard Female and Child Labour.
4.3: Labour Welfare Legislations in India
4.4: Labour Reforms- Second National Commission on Labour, Dr. Arjun Sengupta Report; Labour Market reforms; Exit Policy and Implications

Module V : Manpower Planning
5.1: Meaning and Definition of Manpower Planning; Need for Manpower Planning; Forms of Manpower Planning; Process of Manpower Planning.
5.2: Education, Training and Development of Manpower; Recruitment of Industrial Labour.
5.3: Labour and Rationalisation; Labour and Automation.

Suggested Readings :-

 1.Esrafil Ali , Labour Economics, Everest Publishing House
2. Mamoria, C.B., Labour Problems and Social Welfare in India, Kitab Mahal, Allahabad.
3. Mamoria, C.B. ,Mamoria, Satish &Subba Rao, P., Dynamics of Industrial Relations, Himalaya Publishing House, Mumbai.
4.Nigel O'Leary, Paul Latreille, and Peter J. Sloane, Modern Labour Economics, Routledge Publications
5. Pierre Cahuc and A. Zylberberg, Labour Economics, MIT Press
6. Sinha, B.C. & Sinha Pushpa (2012): Labour Economics,(Hindi), SBPD Publication, Agra.
7. Tyagi, B.P. H.P.Singh, Labour Economics and Social Welfare,(Revised Edition), Jai Prakash Nath and Co
8. Venkata Rathnam , C.S., Globalisation and Labour Management Relations, Dynamics of Change, Sage Publication, New Delhi.

SEMESTER IV : Paper ECN-C-415 (Core Paper)

ECONOMICS OF SOCIAL SECTOR

(5 Credits: 60 Lectures + 15 Tutorials)
(100 marks= 30 marks (Mid Semester) + 70 marks (End Semester)

Instruction to Question Setters for: -
1)Mid Semester Examination (MSE): 30 marks
The Mid Semester Examination shall have three components.
(a) Two Semester Internal Assessment Test (SIA) of 20 Marks each("Best of Two" shall be applicable for computation of marks for SIA).There will be two groups of questions in each written examination of 20 marks. Group A shall be compulsory and will contain five multiple choice type questions consisting of 1 mark each. Group B will contain five descriptive type questions of five marks each, out of which any three are to be answered.
(b) Class Attendance Score of 5 marks (Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).
(c) Day to Day & Extracurricular activities of 5 marks.
2)End Semester Examination (ESE):*There will be two groups of questions. Group A is compulsory and will contain two questions. Question No.1(a)will contain six multiple-choice type questions of1 mark each. Question No. 1(b)will contain two short answer type questions of 4 marks. Group B will contain eight descriptive type questions of fourteen marks each, out of which any four are to be answered.*

Module I : Introduction
1.1 Meaning of Social Sector; Areas of concern in development of Social Sector-Education, Health, Water Supply and Sanitation, Poverty alleviation, Housing condition; Debate on Education And Health as Consumption or Investment Goods
1.2 Importance of social sector in economic Growth and Development; Sources and problems of Human capital formation; Human capital vs physical capital
1.3 Social Sector Development indicators- Meaning, Measures and India's position in Poverty rates, Inequality rate, Gender Equality measures, Measures of Educational attainment, Health and Nutrition indicators, Employment and Unemployment rates, Indicators of Nutrition, Standard of living measures, Health and Education Expenditure.
Module II : Economics of Education
2.1 Role of Education in Economic Development; Educated Unemployment In Developing Countries; Education And Migration-The Concept Of Brain Drain. 2.2 Benefits of education- Direct and Indirect benefits, Private and Social benefits; Cost-Benefit analysis
2.3,Demand for Education- Private and Social; Determinants of Demand and Supply for education; Costs of education-private cost & social cost ; Wastage and Stagnation in Education
2.4 Educational Planning: Meaning, components, objectives and importance ; Educational financing- resources mobilization and utilization, Pricing problems in Education; Public expenditure on education in India
Module III : Economics of Health
3.1 Importance of Health in Economic Development

3.2 Determinants of health- Income, Nutrition and Food security, Water supply and Sanitation , Morbidity , Genetic factors, Environment issues

3.3 Economic and Social dimensions of health care; Demand and Supply of health care; Appraisal of health care financing: Cost-Benefit and Cost-Effectiveness approaches ; 3.4 Public expenditure on health in India; Health care delivery in India-Problems and challenges

Module IV : Gender and Development

4.1 Concepts of Gender and Sex ; Measuring how women fare- GDI and GEM; Gender Budgeting; Gender-blind, Gender-neutral and Gender-Redistribute Policy

4.2 Role of women in economic Development; Women in Development (WID) , Women and Development (WAD) and Gender and Development (GAD) Phases.

4.3 Approaches to Women Development- The Welfare Approach, The Equity Approach, The Anti-Poverty Approach, The Efficiency Approach, The Empowerment Approach

4.4 Status and causes of Gender inequality in India in Income, in Health, in Education, (literacy, enrolment and dropout), and in Health(sex ratio, mortality and life expectancy), India's Missing women

Suggested Readings : -

1. Becker, G.S. (1974): Human Capital. 2nd edition, NBER, New York.
2. Becker, G.S. (2010): The Economics of Discrimination, Univ. of Chicago Press
3. Berman, P And M.E.Khan (1989): Paying For India's Health Care, Sage N.Delhi.
4. Blaug, Mark (1972): Introduction to Economics of Education, London: Penguin.
5. Dash, M.· (2004), "Education in India: Problems and Perspectives", Atlantic publisher and distributors.
6. Folland, S., A.C. Goodman, and M. Stano (2001): The Economics of Health and HealthCare. New Jersey: Prentice Hall.
7. Klarman, H.E. (1995). The Economics of Health. New York: Columbia University Press.
8. Mahrotra, M. (2013): Gender Inequality In India, Prabhat books publication
9. Padmanabhan C. B. (1971): Economics of Educational Planning in India, Arya book depot
10. Panchamukhi, P.R. (1980): Economics of Health: A Trend Report. ICSSR Survey, New,Delhi: Allied Publisher.
11. Psacharopoulos, G: Economics of Education, Research and Studies, Pergamon Press, UK
12. Phelps, Charles E. (2010): Health Economics. 4th edition, Prentice Hall.
13. Steven J. Klees (1991): Introduction to Economics of Education, University of Chicago Press
14. Susan J. Penner (2004): Introduction to Health Care Economics & Financial Management, Lippincot William
15. Tilak, J.E.G. (1989): Economics of Inequality in Education. New Delhi: Sage.
16. Walker, Melanie, and Elaine U. (eds.) (2007): Amartya Sen's Capability Approach and Social Justice in Education, Macmillan.
17. Whittington, R.(2008): Introduction to Health Economics Concepts - A Beginners Guide, GreenflintL.t.d.
18. William, Jack (2000): Principles of Health Economics for Developing Countries. WBI Development Studies.
19. World Bank (1993): The World Development Report 1993: Investing in Health. Oxford University Press.

SEMESTER IV : Paper ECN-D-416

DISSERTATION

The paper shall be of 100 marks , comprising of:
Part A, Research Methodology -30 marks
Part B, Dissertation and Viva. -70 marks

Part A - RESEARCH METHODOLOGY

There will be a Mid Semester (written) Examination (MSE) on Research Methodology for 30 marks.
*There will be **two** groups of questions. **Group A shall be compulsory** and will contain ten **multiple type questions** consisting of **1 mark** each. **Group B** will contain eight **descriptive type questions** of **five** marks each, out of which any **four** are to be answered.*

Syllabus for Research Methodology:-

Introduction of Research Methodology: Meaning of Research; Objectives of Research; Research Methods
Types of Research: Descriptive vs. Analytical Research; Applied vs. Fundamental Research; Quantitative vs. Qualitative Research; Conceptual vs. Empirical Research
Research Process: Basic Overview; Literature Review; Formulating the Research Problem; Hypothesis; Research Questions; Research Methodology
Data Collection: Primary and Secondary Data; Sampling Methods; Observation Method, Interview Method, Questionnaires, Case Study Method, Historical Method,
Data Processing , Analysis **and Conclusions**: Classification and Tabulation; Interpretation of Data/Results; Conclusions/Findings.
Academic Writing: Synopsis; Article/Research Paper; Research Project; Thesis; Dissertation; Book; Book-Review
Criteria of Good Research; Plagiarism
Citation Style &Methods: MLA, APA, Foot Note, In-Text citation , End Note, Footnotes, Bibliography, References

Reference Books:
a) Best and Kahn, Research Methodology, PHI Limited.
b) Deepak Chawla and NeenaSondhi, Research Methodology, Vikas Publications
c) Kothari, C.R. Research Methodology (Methods and Techniques), New Age Publisher.
d) Mukherjee, Dr Rabindrnath, SamajikShodhvaSankhiki, Vivek Prakashan
e) Ram Ahuja, Research Methodology, Rawat Publications (English and Hindi)
f) Rastogi, S R, SamajikAnusandhan ,Kurab Mahal

Part B- PROJECT REPORT

There will be an End Semester Examination for 70 marks in which a Project Report on the work done under a supervisor shall be submitted for evaluation by an external examiner. There shall be a Viva Voce on the Project Report conducted jointly by One Internal Examiner and one External Examiner. *(Project Report and viva-voce = 70 marks)*

Project Report/ Dissertation shall be evaluated under the following heads:
• Motivation for the choice of topic and Relevance of topic
• Project dissertation design and Report Presentation
•Content depth
• Methodology and Application of Research technique in Data collection and analysis
• Results and Discussion
• References
• Participation in Internship programme with reputed organization(if relevant)
• Viva-voce
Note:
(a) The project work will be on a relevant topic of choice by the student and shall be conducted Independently under the supervision of a supervisor from the faculty of the Department.
Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.
(b) Before submission, the student will present his work in a Seminar held in the Department.
(c) Project work shall consist of
• Field work/Lab work related to the project.
• Preparation of dissertation based on the work undertaken.
• Presentation of project work in the seminar on the assigned topic & open Viva Voce there on.
(d) Project Report must be original .
(e) Each student must submit in the Department, two copies of the Project Report forwarded by the Head of the Department and duly signed by the Supervisor concerned.

Format of the Dissertation/Project:
The **Dissertation/Project** shall be presented with the following specifications:
(a) **Size of Paper**: A4. Dissertation/Project must be printed on one side of the paper.
(b) **Font Type**: Times New Roman/Arial for English and Kruti Dev 010 for Hindi.
(c) **Font Size**: Font size for English text is 12pt. in standard form and for Hindi is 14pt.
(d) **Font of Chapter Headings and Sub-Headings**:
• Chapter headings may be written in all Capitals, bold text in point size 15
• Sub-headings are written with left margin alignment
• First level sub-headings are written in normal sentence case using bold text in point size 14

• Second level sub-headings are point size 13

(e) **Spacing and Paragraphing**:

• Printing shall be in standardised form with 1.5 line spacing

• Leave as triple spacing (2 empty lines) in base point size 12 before and after sub-headings and one empty line after all sub-headings

• Use one empty line between left-justified paragraphs

(f) **Margin**: Left margin should be 4cms and right and top margin should be 2cms. Bottom margins should be 2.5cms. No ornamental bordering of sides is permitted.

(g) **Page Numbering**: Preliminary pages of the **Dissertation/Project**, i.e. those preceding in text are to be numbered in Roman numbered. Text should be numbered in Arabic beginning with Pg No 1 on the first page of chapter 1.

(h) Preliminary sections of the **Dissertation/Project** should include, Declaration of Attendance**,** Certificate from Supervisor**,** Declaration by Candidate and Supervisor regarding Plagiarism**,** Acknowledgement, Table of Contents, List of Tables, List of Figures/Diagrams, List of Abbreviations (if any) and an Abstract of the Dissertation/Project.

(i) **Referencing and Citation Style**: Citation i.e. a way of giving credit to individuals for their creative and intellectual works that you utilised to support your research, differs by faculty in the style of ordering, punctuating and formatting of name, date, page, work etc.

The referencing of work and Citation style in the Dissertation/Project submitted in Subject of Economics, **Faculty of Social Science** will be in **American Psychological Association (APA) style (6th edition)**

Format of question Paper of Mid-Semester Theory Examination

Binod Bihari Mahto Koyalanchal University, Dhanbad
Mid-Semester Examination
Semester Internal Assessment (SIA) (Session: xxxx-xx)
Subject/Code:

Full Marks: 20	Pass Marks: 08	Time: 1.5 Hours

General Instructions:
Candidates are required to give their answers in their own words as far as practicable.
The Questions are of equal value.
Answer any <u>five</u> questions of the following in which Q.1 is compulsory.

<u>Group A</u>

1. **Multiple Choice Questions**   **(1x5=05)**
(i) …………..
(ii) **…………..**
(iii) **…………..**
(iv) **…………..**
(v) **…………..**

<u>Group B</u>

(Descriptive answer type questions)
Answer any <u>three</u> of the following.   **(5x3=15)**
2. …………..
3. …………..
4. …………..
5. …………..
6. …………..

………………………….......................**X**………………………………………….......

University Department of Economics, Binod Bihari Mahto Koyalanchal University, Dhanbad

Format of question Paper of End-Semester Theory Examination

Binod Bihari Mahto Koyalanchal University, Dhanbad
End-Semester Examination xxxx(Session: xxxx-xx)
Subject/Code:

Full Marks: 70	Pass Marks: 28	Time: 3Hours

General Instructions:
Candidates are required to give their answers in their own words as far as practicable.

The Questions are of equal value.

Answer any <u>five</u> questions of the following in which Q.1 is compulsory.

<u>Group A</u>

1. **(A) Multiple Choice Questions (1x6=06)**
(i) **…………..**
(ii) **…………..**
(iii) **…………..**
(iv) **…………..**
(v) **…………..**
(vi)   **…………..**
(B) Short answer type questions
(4x2=08)
(a) …………..
(b) …………..

<u>Group B</u>
(Long answer type questions)
Answer any <u>four</u> of the following.   (14x4=56)
2. **…………..**
3. **…………..**
4. **…………..**
5. **…………..**
6. **…………..**
7. **…………..**
8. **…………..**
9. **Short notes type questions (7x2=14)**
(a) …………..
(b) …………..
(c) …………..
(d) …………..

……………………………………………X………………………………………………