

01 May 2019

**Syllabus for B.A./B.Sc. (Honours) Economics under Kazi Nazrul University**

**Session 2016-17**

**(Under CBCS)**

**Semester-1**

**(C-1)**

**1.1 Microeconomic Theory – I**

**Full Marks: 50**

**1. General Concept**

- Distinction between Microeconomics and Macroeconomics – concept of different Microeconomic units – commodity, consumer, firm, industry, market – concepts of equilibrium, - statics, dynamics, comparative statics and stability of equilibrium.

**2. Theory of Demand**

- The Marshallian Approach: measurement of utility – derivation of demand curve – consumer's surplus.
- Indifference curve approach: indifference curve and its properties, the consumer-pathological cases – price consumption curve and income consumption curve, - price effect, income effect and substitution effect, derivation of demand curve – Giffen Paradox – market demand.
- The Revealed Preferences approach – derivation of demand functions from Revealed Preferences approach.
- Elasticities of demand – price, income and cross elasticities – relation between price elasticity of demand, price and marginal revenue – relation between price elasticity and total expenditure.

**3. Theory of Production and Cost**

- Production function: the neo-classical production function – relation between total, average and marginal productivities – law of variable proportions – the fixed coefficient production function.
- Iso-Profit curve and Iso-cost line: definition of Iso- Profit curve, economic region of production, marginal rate of technical substitution, equilibrium of the producer - constrained output maximization and constrained cost minimization, output and substitution effects – elasticity of substitution – expansion path, returns to scale - homogeneous and homothetic production function, the Cobb Douglas and CES production function.
- Cost function: different concepts of costs, short run cost analysis and long run cost analysis – relation between the expansion path and cost function – total, average and marginal cost curves – long run cost curves as envelope of short run cost curves.

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#### 4. Theory of Perfect Competition

- Perfect competition and pure competition—Short run and long run equilibrium of a competitive firm – Short run and long run supply curves—Long run equilibrium of the competitive industry – price determination in a competitive industry – existence, uniqueness and static stability of equilibrium –long run supply curves of the industry—effects of external economies and diseconomies – effect of change in cost – effect of imposition of tax – effect of price control.

#### References:

1. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L. Mehta: Microeconomics, 7<sup>th</sup> Edn. Pearson.
2. Samuelson and Nordhaus : Economics
3. Koutsoyiannis: Microeconomic Theory
4. Ferguson and Gould: Microeconomic Theory
5. H. Varian: Intermediate microeconomics
6. Henderson and Quandt: Microeconomic Theory

(C-2)

#### 1.2 Macroeconomic Theory-I

Full Marks: 50

##### 1. Introduction

- Scope and nature of Macro Economics with emphasis on macroeconomic problems and policies – Targets & Instruments of macroeconomic policy etc.

##### 2. The National Income and Products Accounts

- Definition, Concepts and Measurement of GNP, NNP, GDP, NDP, NI, DI – The flow of product method and the flow of expenditure method; Concept of GDP deflator and Price Indices.
- Interrelation between measures of National Income in the absence and presence of Governmental sector and International Transactions
- The Accounting Identity of Saving and Investment
- Problems of using National Income as a measure of Economic Welfare.

##### 3. The Classical System

- The Classical view of Macro Economics in respect of the determination of Employment, Output and Prices.

- The classical quantity theory of money and its criticism; The Classical Theory of Rate of Interest - Loanable fund theory.
- Say's Law and Walras' law - The Dichotomy between the real and monetary sectors - Neutrality of money.

#### **4. The Simple Keynesian Model of Income Determination**

- Keynesian Consumption Function and its properties – Factors affecting Consumption Expenditure – Saving Function & its properties
- Determination of National Income – nature of equilibrium – unemployment, full employment and inflation – stability of equilibrium
- Comparative static analysis – the Multiplier analysis with and without governmental sector – Investment Multiplier, Government Expenditure Multiplier, Balanced Budget Multiplier; Limitations of the multiplier analysis. The Paradox of Thrift.

#### **5. The Complete Keynesian Model**

- Commodity market equilibrium (IS) – Money market equilibrium (LM) – IS-LM equilibrium - the Aggregate Demand and Aggregate Supply.
- Introduction of the Labour Market — the interaction between Commodity Market, Money Market and Labour Market – Determination of Equilibrium – Effects of changes in Money Supply and other factors – Comparison with the Classical system – Price Flexibility – Real Balance Effect and Full Employment.

#### **References**

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, Macroeconomics, Pearson Education, 2009.

### **Generic Elective (GE-I)**

#### **1. Historical Perspective of Indian Economy 1857-1947**

**Full Marks: 50**

**1. Introduction: Colonial India: Background and Introduction**

- Overview of colonial economy.

**2. Macro Trends**

- National Income; population; occupational structure.

**3. Agriculture**

- Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

**4. Railways and Industry**

- Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

**5. Economy and State in the Imperial Context**

- The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

**References:**

1. Lakshmi Subramanian, “History of India 1707-1857”, Orient Blackswan, 2010, Chapter 4.
2. Tirthankar Roy, The Economic History of India 1857-1947, Oxford University Press, 3rd edition, 2011.
3. Irfan Habib, Indian Economy 1858-1914, A People’s History of India, Vol.28, Tulika, 2006.

**2. Indian Economics-Post Independence**

**Full Marks: 50**

**1. Structural Changes in Indian Economy**

- Trends in national income, per capita income - Changes in occupational pattern
- Sectoral distribution of national income during the post independence period

**2. Agricultural Sector**

- Land reforms
- Farm size and Productivity
- Green revolution-causes and impacts.
- Agricultural marketing, concepts of food security and public distribution system in India.

**3. Industrial Sector**

- Industrial policy resolution (1948, 1956) - licensing policy; New industrial policy, 1991; the EXIT policy; present problems of SSIs and large scale industries in India and its remedies.

**4. Population**

- Trend of Population Growth in India in recent years-Problems associated with population growth-National population policy - Demographic dividend

**Reference**

1. Dutta and Sundharam: Indian Economy
2. Mishra and Puri: Indian Economy
3. A.N.Agarwal Indian Economy
4. Uma Kapila: Indian Economy
5. Debesh Mukherjee: Samakalin Bharatiya Arthaniti

**Semester-2**

(C-3)

**2.1 Microeconomic Theory – II**

**Full Marks: 50**

**1. Imperfect Competition**

- Theory of monopoly: Characteristics- AR and MR curves under monopoly – Relation among AR , MR and Elasticity of demand – Equilibrium under monopoly – major features of monopoly- index of monopoly power – price discrimination – when possible? – when desirable? – Degree of price discrimination – equilibrium under price discrimination – Is price discrimination desirable? – Equilibrium under Multiple Plant monopoly – Monopsony - Equilibrium under bilateral monopoly
- Monopolistic competition: Short run and long run equilibrium – excess capacity.

**2. Theory of Oligopoly**

- Characteristics of oligopoly - non-collusive oligopoly models of Cournot and Stackelberg – collusive oligopoly – price leadership – market sharing model – price rigidity under oligopoly.

**3. Theory of Factor Pricing**

- Demand for factors of production – Determinants of price elasticity of demand for a factor – marginal productivity theory and its limitations
- Theory of wage - Choice between work and leisure – derivation of individual labour supply curve – total labour supply curve – demand for labour – determination of equilibrium in a competitive labour market- collective bargaining and wage rate.
- Theory of rent - Transfer earning and economic rent – quasi rent – Rent and price
- Theory of profit - Gross and net profit- elements of profit- risk and uncertainty theory- Innovation theory of profit.

#### 4. General Equilibrium and Economic Welfare

- Partial and general equilibrium – a formal statement of general equilibrium approach - the concept of Pareto optimum – Pareto optimality in consumption – Pareto optimality in production – General Pareto optimality condition.

#### References:

1. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L. Mehta: Microeconomics, 7<sup>th</sup> Edn. Pearson
2. Samuelson and Nordhaus : Economics
3. Koutsoyiannis : Microeconomic Theory
4. Ferguson and Gould : Microeconomic Theory
5. H. Varian : Intermediate microeconomics
6. Henderson and Quandt : Microeconomic Theory

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#### 2.2 Mathematical Economics

**Full Marks: 50**

##### Unit 1: Some Basic Mathematical Concepts with Economic Illustrations

- Role of Mathematics in Economics Analysis. Concepts of Variables, Constants and Parameters. The real-number system, A.P. and G.P.
- Types of function – Straight Line, rectangular hyperbola, parabolic, circular, exponential and logarithmic and their geometrical representations, Slope of the Line, Inverse function, Homogeneous function, Homothetic function, Equations and identities, inequalities, Systems of Equations.

##### Unit 2: Calculus and its Applications in Economics

- Differential Calculus: Concepts of first and second order derivatives, rules of derivatives-addition, subtraction, product and division, and derivatives of functions; Concepts of partial derivatives. Applications - Elasticities, utility-production-cost-revenue-profit-functions.
- Maxima and Minima: unconstrained optimization, necessary and sufficient conditions for local optima, notions of concavity and convexity of functions, points of inflexion. Constrained optimization total, marginal and average costs and revenues.
- Integral Calculus: Rules of Integration, Methods of Integration, Integration by parts and Definite integrals - area under curves. Economic examples measures of consumer surplus, present discounted values calculation and elements of investment analysis.
- Difference and Differential Equations: Nature, Solution of First Order Equations homogeneous and non-homogeneous. Economic examples – Cobweb and other simple Dynamic Models.

### Unit 3: Linear Algebra & Input -Output System

- Various types of Matrices and Matrix operations. Determinants. Inverse of a Matrix. Rank of Matrix, Cramer's Rule. Solution of simultaneous Equations (upto 3 variables).
- Basic concepts of Linear Programming Problems (LPP)- Solutions –Graphical method, Duality.
- Input-Output Analysis. (Static open models only)

#### Suggested Readings:

1. Knut Sydsaeter and Peter J. Hammond: Mathematics for Economic Analysis
2. Carl Simon and Lawrence Blume: Mathematics for Economics, Norton (edition)
3. G. Archibald and R. Lipsey: An Introduction to Mathematical Treatment of Economics. AITBS
4. A. Henderson and R. Quandt – Microeconomic Theory, McGraw Hill, International Edition.
5. Hal R. Varian- Intermediate Microeconomics: A Modern Approach, fourth edition, W. Norton.
6. W. H. Branson – Macro-economic Theory and Policy. AITBS.
7. Taro Yamane: Mathematics for Economists, Prentice Hall of India, New Delhi (1975).
8. BadalMukherji and V. Pandit – Mathematical Methods for Economic Analysis, Allied Publishers, Second edition.

### GE-2 (Any one) Money and Banking

Full Marks: 50

#### 1. Money

- Definition, Functions, and Different Types of Money (M1, M2 etc.).

2. **Quantity Theory of Money:** Fisher's Version and Cambridge Version.

#### 3. Banking

- Definition and Functions of Commercial Banks, Credit Creation of Commercial Banks.
- Functions of Central Banks, Credit Control Methods of Central Bank.

#### **4. Non-bank Financial Intermediaries in India (NBFIs)**

- Definition of NBFIs, Distinction between Commercial Banks and NBFIs
- Different NBFIs working in India – LIC, IDBI, IFCI, UTI etc.

#### **References**

- S.B. Gupta: Monetary Economics, S.Chand & Co, New Delhi. 1<sup>st</sup> Reprint Edition, 2009.
- L. M. Bhole: Financial Institutions and Markets, Tata McGraw Hill, 4<sup>th</sup> Edition, 2004.
- G, Mankiw. 2007. Economics: Principles and Applications. South Western of Cengage Learning.

### **Public Economics**

Full Marks – 50

#### **1. Introduction to Instruments and Objective of Public Economics**

- The nature, scope and significance of public economics – Concept of Public goods and private goods – characteristics of public goods
- Externality – Types of externality-positive and negative externality (concept only) – Market failure (concept only)

#### **2. Principles of Taxation**

- Ability and benefit approaches – canons of taxation – direct and indirect tax - income versus expenditure tax – Proportional, progressive and regressive taxation - impact, shifting and incidence of taxes- effects of taxation.

#### **3. Public Debt**

- Definition – internal and external public debt – burden of public debt

#### **4. Indian Public Finance**

- Features of India's Federal finance - Center-state financial relations

#### **References:**

1. Musgrave - Theory of Public finance
2. Subrata Ganguly - Public Finance
3. B. Mishra – Public Finance



4. RadhaShyamSamanta – International Economics and Public Economics
5. Debesh Mukherjee – SamakalinBharatiyaArthaniti

**Semester-3**  
**(C-5)**

**3.1 Statistical Method – I**

**Full Marks: 50**

**1. Tabular and Diagrammatic Presentation of Data**

- Statistical Data – classification and presentation – methods of collection of data – difference between variable and attributes – frequency distribution and its diagrammatic presentation – choice of class interval – diagrammatic representation of frequency distribution – frequency curve – cumulative frequency distribution (more than and less than) Ogive - (simple numerical exercise).

**2. Measures of Central Tendency**

- Arithmetic mean, median and mode (for both grouped and ungrouped data) – comparison of mean, median and mode – geometric mean and harmonic mean (for both grouped and ungrouped data) – composite mean (average from combined data) – properties for all these measures-(simple numerical exercise).

**3. Measures of Dispersion**

- Absolute measures – Range, mean deviation and Standard deviation and Quartile Deviation – Relative measures – curve of concentration - (simple numerical exercise)
- Measurement of economic inequality: nature of distribution of income and wealth graduating from income distribution – Lorenz Curve representation of income distribution – Gini Coefficient and Lorenz Curve-(simple numerical exercise)
- Moments and measures of skewness and Kurtosis: moments, skewness and kurtosis – definition – relationship between central and non-central moment – Sheppard's correction - (simple numerical exercise).

**4. Correlation and Regression Analysis: Bivariate, Multiple and Partial**

- Scatter diagram – simple correlation coefficient and its properties, its calculation from grouped and ungrouped data, limitations of correlation coefficient. Simple regression analysis – properties of regression line – relationship between correlation coefficient and regression coefficient. Spearman's rank correlation coefficient (without tie) – Kendall's rank correlation coefficient- (simple numerical exercise).

**5. Index Numbers**

- Purpose and uses of index number, problems of construction, different formulae for price and quantity index numbers, tests for index numbers, chain index, and cost of living index-(simple numerical exercise)

**6. Time Series**

- Nature and decomposition of time series – analysis of trend—polynomial trend – exponential trend – non-linear growth curves – moving average method – seasonal component-(simple numerical exercise)

**References:**

1. Goon, Gupta and Dasgupta – Fundamental of Statistics, Vol. I & II
2. Goon, Gupta and Dasgupta – Basic Statistics
3. N. G. Das – Statistical Method (Part I & II)
4. Yule and Kendall – An Introduction to the Theory of Statistics
5. Gupta and Kapoor – Fundamental of Mathematical Statistics.

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**3.2 Macroeconomic Theory – II**

**Full Marks: 50**

**1. Consumption Function**

- Empirical findings regarding Consumption Function – Alternative Theories regarding its behaviour – Keynes, Smithies, Duesenberry, Friedman, Ando-Modigliani.

**2. Money Market**

- Three motives of holding money – Transaction, Precautionary and Speculative demand for money
- Keynesian liquidity preference theory – indeterminacy of rate of interest in the liquidity preference theory – the liquidity trap
- The inventory theoretic approach to transaction demand for money – Baumol and Tobin
- Supply of money – credit creation by commercial banks – money multiplier – interest sensitivity of money supply

**3. The Investment Function**

- The Keynesian analysis of Investment – The Marginal Efficiency of Investment, and its relation with the amount of Investment – Shortcomings of Keynesian analysis
- Net Present Value criterion and Marginal Efficiency criterion of Investment
- The Fixed Accelerator Principle of Investment – its Implications and Limitations.

- The Flexible Accelerator Principle of Investment – its Implications and Limitations, (Multiplier accelerator theory).

#### 4. Theories of Inflation

- The Quantity Theory approach to Inflation
- Demand Pull Inflation and Inflationary Gap analysis; Its shortcomings
- Concepts of Cost Push & Mark Up inflation
- The Philips Curve and the trade-off between Inflation and Unemployment – short-run and long-run Philips Curve
- Consequences of inflation – Measures to control Inflation.

#### References

1. Rowan, D.C – Output, Inflation & Growth
2. Mankiew – Macroeconomics
3. Sikdar, S – Principles of Macroeconomics, OUP
4. D'souza, Erol – Macroeconomics
5. Andrew B. Abel, Ben S. Bernanke, Ben Croushore – Macroeconomics, 8<sup>th</sup>Edn. Pearson.
6. Ackley (2<sup>nd</sup> ed.) – Macroeconomic Theory and Policy
7. Branson – Macroeconomic Theory and Policy
8. Dornbusch and Fisher: Macroeconomics
9. Froyen - Macroeconomics
10. Levacic – Macro Economics

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### 3.3 Development Economics

**Full Marks: 50**

#### 1. Economic Development

- Meaning of Development, different concepts of development –Sustainable development, Participatory development, Inclusive development, Human development, Growth and Development – Broad Indicators of Economic Development – Per capita Income – PQLI– Basic needs approach – Human Development Index – Gender Development Index –Gender Empowerment Measure - Human Poverty Index.

#### 2. Underdevelopment

- Characteristics of underdevelopment – Obstacles to underdevelopment

- Trap Models – Critical minimum effort thesis – Low level equilibrium trap – Process of cumulative causation

### 3. Theories of Economic Growth

- Rostow's Stage Theory – Vicious circle of poverty and Balanced growth (Nurkse) – Unbalanced growth (Hirschman)

### 4. Labour Surplus Economy and Development Strategy

- Concept of surplus labour – Surplus labour as potential saving – Economic development with unlimited supplies of labour (Lewis Model).
- Capital intensive Vs Labour intensive technique – Choice of technique in a labour surplus economy.

### References:

1. Thirlwall: Growth and Development
2. Debraj Roy: Development Economics
3. Meier (ed): Leading Issues in Economic Development
4. K. Basu: A Critique of Less Developed Economy
5. Debesh Bhattacharya: Political Economy of Development
6. Pearce and Turner: Economics of Natural Resources and the Environment

### GE-3 (Any One)

#### 1. Introductory Microeconomics

#### Full Marks: 50

#### 1. General Concept

- Distinction between Microeconomics and Macroeconomics – concept of different Microeconomic units - commodity, consumer, firm, industry, market – concepts of equilibrium.

#### 2. Theory of Demand and Indifference Curve Approach

- The Marshallian Approach: measurement of utility – derivation of demand curve.
- Indifference curve and its properties - price consumption curve and income consumption curve, - price effect, income effect and substitution effect, derivation of demand curve – Giffen paradox– market demand – concept of average revenue, marginal revenue.

#### 3. Theory of Production

- Production function – relation between total, average and marginal productivities – law of variable proportions – the fixed coefficient Production function.

- Iso-Profit curve - economic region of production, marginal rate of technical substitution, equilibrium of the producer -constrained output maximization and constrained cost minimization – elasticity of substitution – expansion path.

#### 4. Theory of Cost

- Different concepts of costs, short run cost analysis and long run cost Analysis – total, average and Marginal cost curves – long run cost curves as envelope of short run cost curves.

#### References

1. Robert S. Pindyck, Daniel L. Rubinfeld, Prem L. Mehta: Microeconomics, 7<sup>th</sup> Edn. Pearson.
2. Samuelson and Nordhaus : Economics
3. Koutsoyiannis: Microeconomic Theory
4. Ferguson and Gould: Microeconomic Theory
5. Haridas Acharya : Adhunik Arthaniti
6. Jaydeb Sarkhel: Arthanaitik Tatta

## 2. Contemporary Issues of Indian Economy and Scenario of West Bengal

**Full Marks: 50**

### 1. Economic Planning

- Planning in a mixed economy – The Indian experience – Pre 1991 and Post 1991 plans – Overall success and failures
- Critical Evaluation of functioning pattern of Planning Commission
- Objectives behind formation of Niti Ayog

### 2. Public Sector in India

- Role of public sector in India during the plan period
- Problems and policies with special emphasis on disinvestment policy

### 3. India's Foreign Trade

- Foreign trade policy 2009-2014
- Position of India's trade balance
- Special economic zones – Arguments in favour of and against them

- Foreign investment inflows since 1991.

#### 4. The West Bengal Economy

- Economic and demographic consequences of partition
- Land reform in West Bengal and its impact
- Changing composition of GDP during post reform period
- Scenario of industrial development in West Bengal and employment generation during post reform period.

#### References

1. Dutta and Sundharam: Indian Economy
2. Mishra and Puri: Indian Economy
3. Dhingra, I.C: Indian Economy
4. Bhagwati and Chakraborty: Contributions to Indian Economic Analysis
5. Jalan: Indian Economic Crisis
6. Uma Kapila: Indian Economy
7. Debesh Mukherjee: Samakalin Bharatiya Arthaniti

#### SEC-I (Any One)

##### 1. Data Analysis

**Full Marks: 50**

##### 1. Presentation of Data

- Introduction, methods of presentation of data, textual presentation of data, tabular presentation of data, diagrammatic representation of data.

##### 2. Data Processing

- Introduction to Data Processing – Steps of Data Processing – Problems associated with Data Processing

##### 3. Analysis of Data

- Various Types of Data Analysis (quantitative, qualitative; cross section, time series) – Introduction of Statistical Tools used in Data Analysis

#### References

1. Gary Koop – Analysis of Economic Data, John Wiley & Sons Ltd.
2. C R Kothari – Research Methodology: Methods and Techniques, New Age International.

3. B C Tandon – Research Methodology in Social Sciences, Chaitanya Publishing House.

4. D. Bhattacharya and S. Roychowdhury – Statistics Theory and practice

## 2. Basic Computer Applications

**Full Marks: 50**

### 1. Introduction to Excel

- Sort: Sorting data on one column or multiple columns, in ascending or descending order
- Filter: Filter data to display records that meet certain criteria.
- Conditional Formatting: Highlight cells with a certain colour, depending on the cell's value.
- Charts: Line charts, column charts, pie charts, area charts and surface charts

### 2. Excel Basics needed for Statistical Analysis of the Data

- Pivot Tables: To extract the significance from a large, detailed data set.
- Tables: Create tables to analyze data in Excel
- Solver: Use Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems.
- Creating a top-ten list with values or percentages
- Setting up subtotals
- Counting the number of unique items in a list
- Using SUMIF and COUNTIF functions

References:

1. Levine, Stephan, Krehbiel, Berenson: Statistics for Managers Using Microsoft Excel PHI Learning.
2. Gary Koop – Analysis of Economic Data, John Wiley & Sons Ltd.
3. C R Kothari – Research Methodology: Methods and Techniques, New Age International.

**Semester-4**

**(C-8)**

**4.1 Statistical Method – II**

**Full Marks: 50**

### 1. Probability Theory

- Random Experiments – Mutually Exclusive, Equally Likely and Collectively Exhaustive Events – Probability: Classical and Axiomatic Definition – Complementary Event – Theorem of Total Probability – Conditional Probability – Theorem of Compound Probability – Independent Events, Bayes' Theorem.

## **2. Random Variables and Mathematical Expectation**

- Definition of random variables – probability function and distribution function– mass and density function – expectation and variance of random variables.

## **3. Univariate Probability Distributions**

- Binomial, Poisson, Normal Distributions – Mean, Variance. Moment Generating Functions.

## **4. Sampling Theory and Sampling Distributions**

- Population and Sample – Parameter and Statistic – Random Sampling – Practical Methods of Drawing Random samples – Random sampling Numbers – Sampling Distribution – Standard Error
- Sampling Distributions associated with Normal Population, Expectation and Standard Error of Sample Mean, Chi-Square Distribution, Student's t Distribution, F-Distribution (definition and importance, properties and uses only)

## **5. Estimation and Testing of Hypothesis**

- Desirable Properties of estimators – Unbiasedness, Minimum Variance, Efficiency, Consistency – Simple Methods of Point Estimation – Maximum Likelihood Estimators and their properties.
- Null hypothesis & Alternative Hypothesis – Confidence Intervals – Testing of Hypothesis – p-value – Type-I and Type-II Errors – Simple applications of tests for the Mean and Variance of a Univariate Normal Population.

### **References:**

1. Nagar and Das – Basic Statistics
2. Mathai & Rathie – Probability and Statistics
3. Goon, Gupta and Dasgupta – Fundamentals of Statistics, Vol. I & Vol. II
4. R Spiegel and L.J. Stephen. Statistics, Schaum Series
5. Sheldon Ross: A First Course in Probability, 9<sup>th</sup>Edn. Pearson
6. E. Rukmangadachari: Probability and Statistics-Pearson

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**4.2 Indian Economics -I**



**Full Marks: 50**

**1. Structural Changes in Indian Economy**

- Trends in national income, per capita income - Changes in occupational pattern
- Sectoral distribution of national income during the post independence period

**2. Agricultural Sector**

- Land reforms
- Farm size and Productivity
- Green revolution-causes and impacts.
- Agricultural marketing, concepts of food security and public distribution system in India.

**3. Industrial Sector**

- Industrial policy resolution (1948, 1956) - licensing policy; New industrial policy, 1991; the EXIT policy; present problems of SSIs and large scale industries in India and its remedies.

**4. Population**

- Trend of Population Growth in India in recent years-Problems associated with population growth-National population policy - Demographic dividend

**5. Poverty and Unemployment**

- Poverty-Concept and measurement issues
- Nature and types of unemployment in India - Problem of measurement of unemployment
- Unorganized labour market-Participation of female and child labour

**6. The Parallel Economy in India**

- Concept of black money – estimates – Sources – impacts – measures to tackle black money

**Referencess**

- |                               |   |
|-------------------------------|---|
| 6. Dutta and Sundharam:       | Indian Economy                            |
| 7. Mishra and Puri:           | Indian Economy                            |
| 8. A.N.Agarwal                | Indian Economy                            |
| 9. Dhingra, I.C:              | Indian Economy                            |
| 10. Bhagwati and Chakraborty: | Contributions to Indian Economic Analysis |
| 11. Jalan:                    | Indian Economic Crisis                    |
| 12. Uma Kapila:               | Indian Economy                            |
| 13. Debesh Mukherjee:         | SamakalinBharatiyaArthaniti               |

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**4.3 Environmental Economics**

**Full Marks: 50**

**1. Introduction**

- Key environmental issues and problems, basic concepts from economics.

**2. The Theory of Externalities**

- Pareto optimality and market failure in the presence of externalities; property rights and common property resources, the Coase theorem.

**3. The Design and Implementation of Environmental Policy**

- Overview, Pigouvian taxes and effluent fees, tradable permits, choice between taxes and quotas under uncertainty, optimum pollution control model.

**4. International Environmental Problems**

- Trans-boundary environmental problems; economics of climate change; trade and environment.

**5. Sustainable Development**

- Concepts; measurement, Indian perspectives.

**References:**

1. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2<sup>nd</sup> edition, 2010.
2. Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W. Norton, 5<sup>th</sup> edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3<sup>rd</sup> edition, 2003.
4. Rabindranath Bhattacharya (ed.) Environmental Economics. OUP

**GE-4 (Any One)**

**1. Introductory Macroeconomics**

**Full Marks: 50**

**1. Introduction**

- Scope and nature of Macro Economics with emphasis on macroeconomic problems and Policies – Targets & Instruments of macroeconomic policy etc.

**2. National Income Accounting**

- Circular flow of income – two sector model – Definition of national income - Concepts and Measurement of GNP, NNP, GDP, NDP
- Method of calculating national income- product method, income method and expenditure method.

**3. The Classical System**

- Classical theory of employment – full employment – equilibrium in classical system – Say's law of market - criticism of classical model.

#### 4. The Simple Keynesian Model

- Aggregate demand, aggregate supply – Keynesian Consumption Function and its properties – Factors affecting Consumption Expenditure– MPC, APC – Saving function – income and output determination in two sector model–the multiplier.

#### References

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
5. Haridas Acharya : Adhunik Arthaniti
6. Jaydeb Sarkhel: Arthanaitik Tatta

## 2. Development Economics

Full Marks: 50

### 1. Economic Development

- Meaning of Development, different concepts of development – Sustainable development, Participatory development, Inclusive development, Human development, Growth and Development – Broad Indicators of Economic Development – Per capita Income – PQLI– Basic needs approach – Human Development Index – Gender Development Index – Gender Empowerment Measure - Human Poverty Index.

### 2. Underdevelopment

- Characteristics of underdevelopment – Obstacles to underdevelopment

### 3. Theories of Economic Growth

- Rostow's Stage Theory – Vicious circle of poverty and Balanced growth (Nurkse)

### 4. Labour Surplus Economy and Development Strategy

- Concept of surplus labour – Surplus labour as potential saving – Economic development with unlimited supplies of labour (Lewis Model).

#### References:

1. Thirlwall: Growth and Development
2. Debraj Roy: Development Economics

3. Meier (ed): Leading Issues in Economic Development
4. K. Basu: A Critique of Less Developed Economy
5. Debesh Bhattacharya: Political Economy of Development
- Pearce and Turner: Economics of Natural Resources and the Environment

**SEC-2 (Any one)**

**Research Methodology**

**Full Marks: 50**

**1. Foundations of Research**

- Meaning, Objectives, Motivation, Utility. Concept of theory, empiricism.
- Characteristics of scientific method – Understanding the language of research – Concept, Construct, Definition, Variable, Research Process.

**2. Problem Identification & Formulation**

- Research Question – Investigation Question – Measurement Issues – Hypothesis–Null Hypothesis & Alternative Hypothesis. Hypothesis Testing – Logic & Importance.

**3. Research Design**

- Concept and Importance in Research – Features of a good research design
- Exploratory Research Design – concept, types and uses
- Descriptive Research Designs – concept, types and uses
- Experimental Design: Concept of Independent & Dependent variables.

**References**

1. Business Research Methods – Donald Cooper & Pamela Schindler, TMGH, 9th edition
2. Business Research Methods – Alan Bryman & Emma Bell, Oxford University Press.
3. Research Methodology – C.R.Kothari

**2. Computer Applications in Economics**

**Full Marks: 50**

**1. The Nature and Sources of Data for Economic Analysis**

- Types of Data – Time Series, Cross Section – Basic Data Presentation; Introduction to Excel/Spreadsheet, Excel Basic, Formulas and Functions, Sort and Filter.

**2. Graphical Representation of Data Sets**

- Pie Chart, Bar Chart, Histogram frequency Polygon, Ogive, Bivariate Scatter Diagram.

**3. Using Spreadsheet / Excel for Statistical Analysis Estimation of Descriptive Statistics**

- Mean, Median, Mode, Standard Deviation, Simple Correlation, Regression.

**References:**

Dhanasekaran, K: Brinda Publication, Computer Application in Economics

**Semester -5  
(C-11)**

**5.1 Public Finance**

**Full Marks: 50**

**1. Introduction to Public Finance**

- Definition and scope of public finance
- Types of fiscal functions – allocation function, distribution function and stabilization function – fiscal functions in a developing economy
- Concept of Public goods and private goods – characteristics of public goods
- Externality – Types of externality-positive and negative externality – Market failure

**2. Principles of Taxation**

- Ability and benefit approaches – canons of taxation – direct and indirect tax - income versus expenditure tax – Proportional, progressive and regressive taxation - impact, shifting and incidence of taxes- effects of taxation.

**3. Public Debt**

- Definition – internal and external public debt – burden of public debt

**4. Indian Public Finances**

- Fiscal federalism in India – Center-State Financial relations

**References:**

- 1.R.A. Musgrave and P.B. Musgrave, Public Finance in Theory & Practice, McGraw Hill Publications, 5<sup>th</sup> edition, 1989.
2. J. Hindriks, G. Myles: Intermediate Public Economics, MIT Press, 2006.
3. H. Rosen, T. Gayer: Public Finance, 9<sup>th</sup> ed., McGraw-Hill/Irwin, 2009.
4. H. L Bhatia Public Finance
5. S. K. Singh Public Finance in Theory and Practice

(C-12)

## 5.2 International Economics

**Full Marks: 50**

### 1. Introduction

- Basis of Trade – gains from trade

### 2. Theory of Trade

- The Ricardian theory – generalization of Ricardian model- the H-O Model, comparison of Comparative Advantage in the two ( HO and Ricardo) – Commodity and Factor prices under trade- factor price equalization (Stolper-Samuelson Theorem), factor intensity reversal and factor Prices-Leontief paradox, gains from trade and income distribution. Offer Curve, Rybczynski theorem, Metzler Paradox.

### 3. Trade Intervention

- Theory of Tariff and income distribution – tariffs terms of trade and domestic prices, tariffs and national income, the optimum tariff, other effects of tariffs – quotas and quantitative trade restrictions -effects of quotas and quantitative trade restrictions and balance of payments- trading state, the infant industry argument.
- Problems of international reserves and liquidity and of development finance.

### 4. Balance of Payments and Problems of Adjustment

- The mechanism of adjustment under fixed exch. Rates – automatic adjustment under Gold Standard- expenditure reducing and Expenditure switching policies –devaluation, the elasticity and absorption approaches – direct controls- mechanism of adjustment under flexible exchange rate and uncertainty, speculation and the stability of exchange rate and inflation- costs and benefits of flexible exchange rates.

### References:

1. Soderstein, Bo: International Economics, 2<sup>nd</sup> Edition
2. Kennen, P: International Economics
3. Caves, Frankel and Jones: World Trade and Payments
4. Krugman and Obstfeld: International Economics

01 May 2019

**DSE (Any Two)**  
**(DSE)**  
**Industrial Economics**

**Full Marks: 50**

1. Scope and methods of Industrial Economics, basic concept of firm, industry and market, organizational form and alternative goals of the firm.
2. Concept of market structure: market concentration, product differentiation: Cournot and Bertrand model. Growth strategy of the firm: Integration, merger, product diversification, innovation.
3. Theory of industrial location: contribution of Weber and Sergeants Florence. Centralized vs balanced regional development: Indian experience.
4. Industrial productivity: Methods of measuring total factor productivity: Kendrick, Solow and Translog method. Partial and total factor productivity trends In India
5. Industrial labour: Policies and problems in India.

**References**

1. R.R.Banthwal : Industrial Economics: An Introduction. Wiley Eastern Ltd., New Delhi. Chs. 1, 3, 4, 6, 8, 9, 16 & 17.
2. S.C.Kuchhal: The Industrial Economy of India, (latest edition). Allahabad. Chaitanya Publishing House. Chs. 7,15 and 18.
3. P.J.Devineet. al: An Introduction of Industrial Economics.
4. Paul R Ferguson: Industrial Economics: Issues and Perspectives , Macmillan Education Ltd
5. Datt&Sundharam : Indian Economy (latest edition). S. Chand and Company, Chs. 10, 27 & 40.
6. David M.Smith: Industrial Location: An Economic Geographic Analysis, John Wiley & Sons Ins. Chp. 8.
7. E.D.Penrose: The Theory of Growth of Firm, Oxford Basil Blackwell, Chs. 7 & 8.
8. Ishar Judge Aluwalia : Industrial Growth in India: Stagnation since Mid Sixties, Oxford University Press, Delhi, Ch..2.
9. Sivaya& Das: Indian Industrial Economy, S.Chand& Co., New Delhi, Chs. 4 & 7.

## **Economics of Health and Education**

**Full Marks: 50**

### **1. Role of Health and Education in Human Development**

- Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

### **2. Microeconomic Foundations of Health Economics**

- Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

### **3. Evaluation of Health Programs**

- Costing, cost effectiveness and cost-benefit analysis; burden of disease.

### **4. Health Sector in India: An Overview**

- Health outcomes; health systems; health financing.

### **5. Education: Investment in Human Capital**

- Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India.

### **6. Education Sector in India: An Overview**

- Literacy rates, school participation, school quality measures.

### **References**

1. William, Jack, Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.
2. World Development Report, Investing in Health, The World Bank, 1993.
3. Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics: Theory and Public Policy, Addison Wesley, 2005.

## **Classical Political Economy**

**Full Marks: 50**

### **1. Classical Background (20 Lectures)**

- Chief features of classical system, Adam Smith Labour Theory of Value, the Ricardian one sector model, Classical political economy and Marx.

### **2. Stages of Development**

- Marxian theory of stages of growth, Rostow's theory of stages of growth.

### **3. Marx's Theory of Value**

- Qualitative and quantitative aspects of value, commodity fetishism, constant and variable capital, circuits of capital, surplus value, organic composition of capital.



**4. The Reproduction Schemes & Accumulation of Capital**

- Industrial reserve army, accumulation and technological change.

**5. Origin of Surplus Value and Profits**

- The law of falling rate of profit - Theories of Crisis: Under consumption, realization crisis, disproportionality crisis.

**References:**

1. Ben Fine- Marx's capital
2. Sweezy- Theory of Capitalist Development.
3. M. Desai- Marxian Economics.
4. Marc Blaug, Economic Theory in Retrospect, 3<sup>rd</sup>Edn.
5. Felix Raj – Contemporary Development Economics From Adam Smith to Amartya Sen

**Indian Economic History**

**Full Marks: 50**

**1. India: Its Colonial Structure**

- Indian economy under colonial regime.

**2. Macro Trends**

- National Income; population; occupational structure.

**3. Agriculture**

- Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

**4. Railways and Industry**

- Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

**5. Economy and State in the Imperial Context**

- The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

**References:**

1. Lakshmi Subramanian, "History of India 1707-1857", Orient Blackswan, 2010, Chapter 4.

2. Tirthankar Roy, The Economic History of India 1857-1947, Oxford University Press, 3rd edition, 2011.
3. Irfan Habib, Indian Economy 1858-1914, A People's History of India, Vol.28, Tulika, 2006.

### **Money and Financial Market of India**

**Full Marks: 50**

#### **1. Money**

- Concept, functions, measurements, theories of money supply determination

#### **2. Financial Institutions, markets, Instruments and financial innovations**

- Role of financial markets and institutions, problem of asymmetric information – adverse selection and moral hazard; financial crisis
- Money and capital markets; organization, structure and reforms in India; role of financial derivatives and other innovations

#### **3. Banking system**

- Indian banking system; changing role and structure; banking sector reforms

#### **4. Central Bank and Monetary policy**

- RBI and its functions, instruments of monetary control, current monetary policy of India

#### **References**

1. Rakesh Mohan: Growth with Financial stability – central banking in an emerging market
2. L M Bhole and J Mahukud: Financial institutions and market
3. M Y Khan: Indian financial system

**Semester-6**

**(C-13)**

**6.1 Basic Econometrics**

**Full Marks: 50**

#### **1. Introduction**

- Concept - Types – theoretical and applied econometrics- importance and role of Econometrics in economics- Classical Methodology of Econometrics.

**2. The Classical Linear Regression Model (Two variable case)** □

- The Classical Ordinary Least Square Method (CLSM) – Assumptions – estimation of parameters in two variable case – Properties of least-square estimators – testing of regression coefficients – BLUE – Goodness of Fit - the Coefficient of determination  $R^2$  – Numerical Problems.

**3. The Classical Linear Regression Model (Three variable case)**

- The Classical Ordinary Least Square Method (CLSM) – estimation of parameters with Two independent variables – Violation of the Assumptions of CLSM – Multicollinearity, Heteroscedasticity and Autocorrelation (Concepts only).

**4. Dummy Variable**

- Introduction – Dummy independent variable – estimation – dummy variable trap

**References:**

1. Dominick Salvatore (2001): Schaum's Outline of Statistics and Econometrics, McGraw-Hill.
2. Maddala: Introduction to Econometrics
3. Gujrati, N Damodar (2011): Basic Econometrics.
4. Peter Kennedy (2004): A Guide to Econometrics, Blackwell Publishers.
5. Pindyck, Robert S., and Daniel L. Rubinfeld (1998): Econometric Methods and Economic Forecasts, 4<sup>th</sup>Edn. McGraw-Hill.
6. Koutsoyannis: An Introduction to Econometrics

(C-14)

**6.2 Indian Economics - II**

**Full Marks: 50**

**1. Economic Planning**

- Planning in a mixed economy – The Indian experience – Pre 1991 and Post 1991 plans – Overall success and failures
- Critical Evaluation of functioning pattern of Planning Commission
- Objectives behind formation of NitiAyog

**2. Indian Tax Structure during Plan Period**

- Composition of Govt. revenue and expenditure
- Trends, problems, reforms in tax structure
- Centre – State financial relation

**3. Public Sector in India**

- Role of public sector in India during the plan period
- Problems and policies with special emphasis on disinvestment policy

**4. India's Foreign Trade**

- Foreign trade policy 2009-2014
- Position of India's trade balance
- Special economic zones – Arguments in favour of and against them
- Foreign investment inflows since 1991.

**References**

1. Dutta and Sundharam: Indian Economy
2. Mishra and Puri: Indian Economy
3. Agarwal: Indian Economy
4. B A Prakash: The Indian Economy: Economic Reforms and Performance since 1991 (2<sup>nd</sup>Eed.), Pearson.

**DSE (Any Two)**  
**DSE**

**Economics of Growth**

**Full Marks: 50**

**1. Introductory Growth Models**

- Harrod Model of Growth – Domar Model of Growth – Comparison of Harrod and Domar Growth Models – Harrod-Domar Growth Model.

**2. Exogenous Growth Model**

- Solow Model – Absolute and Conditional Convergence – Steady State – Golden Rule of Capital Accumulation – Transition of the Golden Rule Steady State.

**3. Endogenous Growth Model**

- Basic AK Model

#### 4. Trade and Development

- Trade as an engine of growth – Terms of trade and economic development (Prebisch – Singer Thesis) – Imports substitution Vs export promotion.

#### References:

1. Barro, Robert and Xavier Sala-i-Martin: Economic Growth. (MIT Press)
2. David N Weil: Economic Growth (Prentice Hall)
3. Todaro and Smith: Economic Development (Pearson Education):
4. Thirwall A.P: Growth and Development (Palgrave McMillan):
5. Felix Raj: Contemporary Development Economics: From Adam Smith to Amartya Sen

### Urban Economics

Full Marks: 50

#### 1. Introduction and Economics of Urbanization

- Definition and Scope of Urban Economics – Emergence and Growth of cities with special references to pre-colonial, colonial and post colonial India – Urban centers as the help and hindrance to economic growth with special references to Rurbanization – Globalization and Urbanization
- Economics of Urbanization- The process of Urbanisation – Factors initiating and perpetuating the urbanization Process – Nature and Dimensions – Urbanisation in West Bengal with special references to Asansol – Trends and Patterns

#### 2. Basics of Urban Economics

- Urban system – Hierarchy and city size distribution; Central Place Theory
- Location Theory- Intra and Inter-urban Location of Economic Activities- The distance-decay relationship- Concept of gradients
- Urban Base Theory – Theory of Optimal City Size

#### 3. Urban Public Economy

- Urban local Administration – Role and Functions – Methods of Financing Urban Government Expenditure – Local Fiscal Problems

#### **4. Urban Problems and Urban Infrastructural Development**

- Urban Housing Problem and Slums – Urban transport – Urban Environment – Urban Poverty, Unemployment, Crime
- Infrastructure Management– Need for Urban Planning – Objectives and Techniques – Methods and Practices – Emerging Planning Process - Strategies and Issues.

#### **References:**

1. O' Sullivan, (2007): Urban Economics (7<sup>th</sup> edition), IRWIN, London ( Basic Text )
2. Evans, A.W(1985), Urban Economics: An Introduction, Basil Blackwell
3. Kundu, Singh and Sivaramakrishnan (2002): A Handbook of Urbanisation in India (2<sup>nd</sup> Edition)
4. Balchinet. al (2000): Urban Economics: A Global Perspective, Palgrave
5. Chatterjee, Mahalaya (2013): “Urbanisation in West Bengal; Trends and Future Perspective”, Local Government Quarterly (June-September)
6. Giri, Pabitra (1997): “Urbanisation in West Bengal”, Economic and Political Weekly 47 (40)
7. Ghosh Mousumi :Urbanisation in Asansol A Study in Spatial Economics, Maha Bodhi Book Agency, Kolkata, 2016.
8. Mukhopadhyaya Ramesh Chandra (ed) (2008) নগরায়নA collection of essays on Urbanisation in Bengali, Underground Literature , Kolkata
9. WhittickArnord (ed) (1974) The Encyclopedia of Urban Planning Mc Graw Hill, New York.
10. Harvey, Jack, (2000), Urban Land Economics, New York, Palgrave Web Resources

### **Economics of Gender and Development**

**Full Marks: 50**

#### **1. Meaning of Gender equality and Major Gender gaps**

- Meaning of gender equality and major gender gaps - Key definition, key pattern of gender gaps today across region, countries and groups- a framework for understanding gaps, constraints and entry points.

#### **2. Women as Decision making Unit**

- Factors affecting decision making by women – property rights, access to and control over economic resources.

### 3. Role of Women in Economic Development

- International development strategy (UNDP) – full participation of women in development process – position in women in educational attainment, health and nutrition, political participation, work participation – crimes and violence against women.

### 4. Women and Policies

- Endangering developmental theories – gender development index and gender empowerment measures – mainstreaming gender into development policies
- Gender planning and development, globalization of feminism and human rights – political participation and leadership of women

### References:

1. Government of India: Towards Equality – Reports of the Committee on the status of Women I n India, Department of Social Welfare , Ministry of education and social welfare, New Delhi.
2. ILO: Women’s Participation in the Economic Activity of Asian Countries.
3. Kabeer, N and R. Subramanyam(ed): Institution, Relations and outcomes: A framework and case studies for Gender –aware planning.
4. Krishnaraj, M., R.M. Sundarshan and A. Shariff, Gender, Population and Development.
5. Bhaswati Das and Vimal Khawas (Ed) “Gender issues in Development” Rawat Publication, Jaipur – 2009.
6. Government of India, Census, 2001-2011.
7. Govt. of India, CSO (2003) Men & Women in India 2002.
8. Govt. of W.B., Report NFHS-II & III.
9. Human Development Report: 2004 onwards.
10. A stipulation Analysis of Women & Girls in W.B. by Mukul Mukherjee, Commission for Women, New Delhi (Report).
11. Statistical Abstract – 2005-06 (Govt. of W.B.) onwards.
12. NCRB, Crime in India – 2011.
13. India, Planning Commission (2000) Development Indication.

### DSE

### Rural Development and Entrepreneurial Economics

Full Marks: 50

### 1. Rural Development versus Agricultural Development

- Decentralised Planning and Participatory Approach to Rural Development and Role of NGOs
- Non-Agrarian activities and integrated rural development
- Rural industrialisation

## **2. Credit and Self-help Groups**

- Credit needs for rural non-farm sector
- Constraints of micro enterprises in rural areas
- Need for SHG formation
- Concept of micro credit
- Self-help groups in India

## **3. Entrepreneurship**

- Concepts and basic characteristics of entrepreneurship
- Function and types of entrepreneurs
- Role of entrepreneurship in economic development
- Rural entrepreneurship – meaning, need and problems

## **4. Theories of Entrepreneurship**

- Motivation theories
- Maslow's need hierarchy theory
- Mcleand's acquired needs theory
- Motivating Factors

### **References:**

1. Khanka, S.S. Entrepreneurial Development, S. Chand and Company
2. Bolton, Bill and John Thompson, Entrepreneur: Talent, Temperament and Technique, Butterworth and Heinemann
3. Szirmai, Adam, Dynamics of Socio-economic Development, CUP
4. Dreze, J. and A. Sen, India: Economic Development and Social Opportunity, OUP
5. Karmakar, K.G., Rural Credit and Self-Help Groups, Sage Publications
6. Sau, S. Rural Industrialization – Development Trajectory in India, Farma KLM



01 May 2019

### **Dissertation/Project**

#### **Full Marks: 50**

1. Introduction – Motivations – Literature Review – Objectives – Methodology – Estimator – Policy Suggestion – Bibliography

#### **2. Project may be on any of the following topics**

- Socio-economic characteristics
- Price index
- Comparison across states w.r.t economic indicators (e.g. SDP, NSDP, SGDP etc.)
- Inequality

Note: Project may be based on field survey or from secondary data source

#### **References:**

- Data Analysis Using Microsoft Excel – Ash Narayan Sah. Excel Books India
- Excel 2010 For Dummies Colin Banfield, John Walkenbach
- Gray Koop (2009), Analysis of Economic Data, 3rd Edition (University of Strathclyde, UK)

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