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Undergraduate Programme in Economics

Curriculum and Syllabus for B.A Economics

(With effect from the Academic Year 2020-21)

February 2020

Note: The Committee is designed Learning Outcome Based Curriculum Framework of Under Graduate Economics Programmes prescribed by UGC

Model Curriculum and Syllabus for
B. A. Economics
(With effect from the Academic Year 2020-21)

I. Preamble

Economics as a branch of knowledge is growing in its significance in terms of practical applications. A wide range of its quantitative and qualitative tools necessary to understand the working of economic systems are helping to solve a wide gamut of real world issues. The knowledge on the subject enhances the critical thinking skills and quantitative reasoning, sharpens the ability to reason, provide a specialised knowledge and problem solving skills. All these are directed to attain the goals of social justice, equity and market intervention strategies helps to make the learner skills relevant to the requirements of the economist and in shaping macro environment. A knowledge of underlying economic issues, key economic indices, cost of choices and trade-offs, the working of domestic and international trade are critical areas that are focussed here. The programme is designed to develop young scholar to be a professional economist.

2. a. Programme Learning Outcome

The programme learning outcomes are the admixture of the focus on the outcomes to be achieved from the teacher and learners point of view. It enables an attainment of a fund of knowledge in the discipline of study coupled with the attainment of a critical thinking and higher order cognitive skills. The ability to apply their knowledge in the field of economics and to device practical solutions and strategies ethically, are also focused here. It helps the student to carry out a range of activities like recalling, explaining, demonstrating, experimenting, appraising and designing, either individually or collectively within the domain of the knowledge of economics.

b. Nature and Extent of the Programme

It encompasses an adequate knowledge of the theories and subject matter of economics to attain the maximisation of individual and societal welfare and issues pertaining to it. The theoretical knowledge ranging from fiscal, monetary, micro, macro, health, international and other developmental spheres of economics are taught with a quantitative backdrop to obtain a totalistic perspective. An extensive use of mathematics is introduced here to facilitate analysis with the prime objective of providing an in depth understanding of the core economic models

Additional knowledge from other related branches like accounting, history and fundamental aspects of management are intertwined in to the programme to obtain a better grip and understanding of the subject.

c. Aim of the Programme

The broad aims of the graduate programme are

- i. To provide both traditional and modern knowledge to work in a professional sphere*
- ii. To supplement the above with an inter-disciplinary training to obtain a better understanding*
- iii. To prepare the student for state and national level competitive examinations especially TNPSC/ TRB/UPSC Civil Services Examinations*

d. Graduate attributes

The graduate should possess a sound knowledge base of the subject, be capable of conducting investigations and skilfully identify, formulate, analyse and solve real life economic issues. He should be able to develop and design solutions to complex economic problems through appropriate use of the acquired fund of knowledge. He should inculcate the innate ability to freely communicate and multi-task in a multi disciplinary setting, within the boundaries set by the society thus promoting equity and justice. This will help him embark on a lifelong learning process in his chosen field of interest.

3. Course Structure

Existing pattern to be followed

4. Course Learning Outcomes and Syllabus

APPENDIX- (R&S)
UNIVERSITY OF MADRAS
B.A DEGREE COURSE IN ECONOMICS
(With effect from 2018-2019)

REVISED SCHEME OF EXAMINATION

SEMESTER I

Course Component		Name of the Paper	Ins Hrs	Credit	Max Marks		Total
					Int	Ext	
PART I	Paper – I	Language Paper -I	4	3	25	75	100
PART II	Paper – I	English Paper-II	4	3	25	75	100
PART III	Core Paper I:	Micro Economics – I	5	4	25	75	100
	Core Paper II:	Statistics-I	5	4	25	75	100
	Allied Paper I:	a) History of Economic Thought (OR) b) Introduction to Operations Research	6	5	25	75	100
PART IV		* Basic Tamil / Advanced Tamil / NME :1- Economics for Managers	2	2	25	75	100
		Soft Skill – I		3	50	50	100

SEMESTER II

Course Component		Name of the Paper	Int. Hrs	Credit	Max Marks		Total
					Int.	Ext.	
PART I	Paper – II	Language Paper – II	4	3	25	75	100
PART II	Paper – II	English Paper – II	4	3	25	75	100
PART III	Core Paper III	Micro Economics – II	5	4	25	75	100
	Core Paper IV	Statistics- II	5	4	25	75	100
	Allied Paper II	a) Health Economics (OR) b) Computer Applications in Economics	6	5	25	75	100
PART IV		* Basic Tamil / Advanced Tamil / NME II- Indian Economy for Competitive Examinations	2	2	25	75	100
		Soft Skill – II		3	50	50	100

SEMESTER III

Course Component	Subjects	Credits	Inst Hours	Maximum Marks		
				Int	Ext	Total
Part I	Language Paper III	3	4	25	75	100
Part II	English Paper III	3	4	25	75	100
Part III	Core Paper V Indian Economy-I	4	5	25	75	100
	Core Paper VI - Mathematics for Economists	4	5	25	75	100
	Allied Paper – III To be chosen from the list of allied subjects	5	6	25	75	100
Part IV	Soft Skill III	3	2	25	75	100
	Environmental Studies		2			
Total Credits		22				

SEMESTER IV

Course Component	Subjects	Credits	Instr Hours	Maximum Marks		
				Int.	Ext	Total
Part I	Language Paper IV	3	4	25	75	100
Part II	English Paper IV	3	4	25	75	100
Part III	Core Paper – VII Indian Economy - II	4	5	25	75	100
	Core paper – VIII Econometrics	4	5	25	75	100
	Allied Paper – IV To be chosen from the list of allied subjects	5	6	25	75	100
Part IV	Soft Skill IV	3	2	25	75	100
	Environmental Studies	2	2	25	75	100
Total Credits		24				

SEMESTER V

Course Component	Subjects	Credits	Inst Hours	Maximum Marks		
				Int	Ext	Total
Part – III	Core Paper IX - Macro Economics –I	4	4	25	75	100
	Core Paper X - Public Finance – I	4	4	25	75	100
	Core Paper XI - International Economics	4	5	25	75	100
	Core Paper XII - Development Economics	4	5	25	75	100
	Elective Paper - I To be chosen from the list of Elective subjects	5	6	25	75	100
Part –I V	Value Education	2	2	25	75	100
Total Credits		23				

SEMESTER VI

Course Components	Subjects	Credits	Inst Hours	Maximum Marks		
				Int	Ext	Total
Part IV	Core Paper – XIII Macro Economics –II	4	4	25	75	100
	Core Paper XIV Public Finance – II	4	4	25	75	100
	Core Paper XV Monetary Economics	4	5	25	75	100
	Elective Paper - II To be chosen from the list of Elective subjects	5	5	25	75	100
	Elective Paper – III To be chosen from the list of Elective subjects	5	6	25	75	100
Part V	Extension Activities	1				
Total Credits		23				

ALLIED PAPERS: First Year – Semester

1. History of Economic Thought (or)
2. Introduction to Operation Research

Allied – II Semester - II

1. Computer Applications in Economics
2. Health Economics

Allied – III Semester - III

1. Rural Economics
2. Tourism for Development
3. Demography

Allied – IV: Semester IV

1. Tamil Nadu Economy
2. Economic History of India
3. Gender Economics

LIST OF ELECTIVE PAPERS:

Fifth Semester: Elective – I

1. Agricultural Economics (or)
2. Labour Economics

Sixth Semester: Elective - II

- Industrial Economics
Managerial Economics

Sixth Semester: Elective - III

- Environmental Economics
Financial Markets and Institutions

UNIVERSITY OF MADRAS
Semester -I
Core Paper- I: Micro Economics I

Learning Outcomes:

Students will acquire

- **An understanding of the basic conceptual framework of economics**
- **Knowledge on working of market mechanism**
- **An analytical impact of changes in market forces on price, income and output over time**
- **An overview of consumer behavioural patterns to arrive at equilibrium**
- **Insights pertaining to production, production function and producers equilibrium**

Unit I

Definitions of Economics –Scope and methods of micro economics- theories and models – production frontier – economic problems – free markets

Unit II

Firms and households – demand function and supply function –determinants – shift vs movement – law of demand and law of supply – exceptions and applications – determination of market equilibrium.

Unit III

Elasticities of demand and supply – slope – types – price, income, cross, substitution – calculating Elasticities – determinants –time dimensions.

Unit IV

Cardinal Utility Approach – Total Utility and Marginal Utility –Law of Diminishing Marginal Utility – Law of equi-marginal utility – Limitations – Ordinal Utility – Indifference Curves – Properties – Marginal Rate of Substitution – Consumer's Equilibrium –Hicksian Price Effect -- Concept of Consumer Surplus.

Unit V

Production Function – Law of Variable Proportions – Iso-quants – Marginal Rate of Technical Substitution – Law of Returns to Scale – Producers' Equilibrium – Least cost combinations.

References

- 1. Gregory Mankiw (2014) Economics: Principles and Applications, New Delhi, Cengage Learning India**

2. **Koutsiyannis A. (2003) Modern Micro Economics – Palgram Macmillan (UK) 2nd Edition.**
3. **Robert Pindyck and Daniel Rubinfeld (2017) 8th Edn. Micro Economics, Pearson Education.**
4. **Varian,H.(2000),Intermediate Microeconomics: A Modern Approach, W.W.Norton, NewYork**

Core Paper – II: STATISTICS - I

Learning Outcomes:

- **Students will be able to explore data, demonstrate skill in describing, analyzing data appropriately**
- **To learn to empirically verify simple economic law/ theory**
- **Should be able to conduct simple economic analysis**

Unit I: Descriptive Statistics/Summary Statistics: (ONLY INTERNAL ASSESSMENT)

Measures of Central Tendency – Minimum, Maximum, Mean, Median, Mode- Measures of Dispersion – Standard deviation, Variance- Measures of deviation from Normality - Skewness, Kurtosis- Frequency Distributions – Univariate, Bivariate- Graphical Illustrations

Unit II: Probability:

Introduction to Probability & Concepts- Addition Rule of Probability- Multiplication Rule of Probability- Conditional Probability & Baye’s theorem- Theoretical Probability Distributions – Binomial, Poisson, Normal distributions

Unit III: Inferential Statistics:

Estimation – Point estimation, Interval estimation- Statistical Hypothesis Testing and Significance- Steps in hypothesis testing – Types of hypothesis, Levels of Significance, Degrees of Freedom, Type I and Types II Errors, One-Tail and Two-Tail Tests, Standard Error, p-Values

Unit IV: Tests of Significance of Means:

Small Sample Test: Student’s t Distribution – Properties of t distribution, Applications of t test- Large Sample Test: Standard Error – Applications & Uses- ANOVA – One-way & Two-way

Unit V:INDEX NUMBERS

Meaning and uses of Index numbers in Economic

S - methods of construction of Index in Economics - Methods of construction of index numbers: Simple Method: 1. Simple Aggregation Price Index, Simple Average of Relatives , 2. Weighted Method: Fisher’s, Laspeyres, Paasche’s Method.

Reference

1. **Aggarwal. Y.P (2002), Statistics Methods – Concepts Application and Computation, Sterling Publishers Private Ltd., New Delhi.**
2. **Gupta, S.P. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.**
3. **Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.**

4. Whigham, David, (2008), *Business Data Analysis Using Excel*, Oxford University Press.
5. Wonnacott H. Thomas & Wonnacott J. Ronald (1969), *Introductory Statistics*, John Wiley & Sons, Inc. New York.
6. Timothy C. Urdan (2005), *Statistics in Plain English, Second Edition*, Lea Lawrence Erlbaum Associates Publishers, London

Non-Major Electives:1

ECONOMICSFORMANAGERS

Learning Outcomes:

- Understanding the basic conceptual framework
- Appreciate the concepts and relationship between quantity and price etc. from the view of consumer and producer and apply them in real world situations
- Acquire the knowledge of the relationship between cost, revenue and its impact on output
- Understand the spectrum of competition in market and key factors useful giving rise for competitive edge.
- Understand cycles of business, and impact of that on business houses , on the economy and measures to control it

Unit-I

Meaning and Nature of managerial economics- characteristics – scope and significance – economic models- objectives of the firms

Unit-II

Demand and supply – elasticity – measurement – determinants – demand forecasting.

Unit-III

Cost of production – types – cost and revenue concepts – short run and long run costs-economies and diseconomies of scale – Revenue concepts

Unit-IV

Competition: Classification of Market Structure–equilibrium and output determination-perfect competition-monopoly - monopolistic competition-Oligopoly.

Unit-V

Theories of Business cycles: Meaning, types -Schumpeter's and Keynesian Theories of Trade Cycle-phases of business cycle- control.

References

1. Keat, Paul G and Young, Philip K.Y - *Managerial Economics*, Pearson Education, New Delhi.
2. K. Jothi Sivagnanam, & Srinivasan. R, (2010), *Business Economics*, Tata McGraw Hill Education Private Limited, New Delhi.
3. Varshney R. L and Maheshwari K L, *Managerial Economics* , Sultan Chand, New Delhi

4. P.L. Mehta, *Managerial Economics- Analysis, Problems and Cases*, Sultan Chand and Sons, 2014.
5. Domnick Salvatore: *Managerial Economics in a Global Economy*, 4th Edition. Cengage, 2009.
6. McGuigan, R. James, Moyer, R. Charles & Harris H. Frederick, (2005), *Managerial Economics- Applications, Strategy, and Tactics*, Cengage Learning, New Delhi.

SEMESTER II

CORE PAPER III- Micro Economics II

Learning Outcomes:

Students will acquire

- **Idea about the concepts of cost and revenue**
- **Knowledge of perfect competition and price and output determination**
- **Information about monopoly market and the practice of price discrimination**
- **Knowledge of monopolistic competition and oligopoly market condition.**
- **Insight into theories of rent, wage, interest and profit.**

Unit I

Cost and Revenue Concepts – Types of Costs – Fixed and Variable Costs – Average, Marginal and Total Costs – Short run and Long run Costs, economies and dis-economies – Traditional and Modern Costs – Total, Average and Marginal Revenues- nature of AR and MR under different market structures.

Unit II

Perfect Competition – Features – Price and Output Determination under Perfect Competition – Short run and Long run equilibrium of the firm.

Unit III

Monopoly – Equilibrium under Monopoly – Price Discrimination – Types and Degrees of Price Discrimination – A Note on Dumping – control of monopoly.

Unit IV

Equilibrium under monopolistic competition – Product Differentiation and selling costs- Excess capacity – Oligopoly – Kinked Demand Curve Model – Cartels – Price leadership model.

Unit V

Marginal Productivity Theory of Distribution – Theories of Rent, Wage, Interest and Profit.

References:

1. **Karl E. Case and Ray C. Fair, (2013)Principles of Economics, 11th Edition, Pearson, New Delhi.**
2. **Gregory Mankiw (2014), Economics: Principles and Applications, New Delhi, Cengage Learning India.**
3. **Koutsiyannis A. (2003), Modern Micro Economics – Palgram Macmillan (UK) 2nd Edition.**
4. **Watson(1975), Price Theory and its uses, Scientific Book Company, Calcutta.**

CORE PAPER IV- STATISTICS – II

Learning Outcomes:

- **Students will be able to explore data, demonstrate skill in describing, analyzing data appropriately**
- **To learn to empirically verify simple economic law/ theory**
- **Will be able to conduct simple economic analysis**

Unit I: Measures of Linear Relationships

Introduction to Correlation – Definition, Types- Estimation of Correlation Coefficients– Simple, Multiple- Properties of Correlation Coefficient-Spearman's, Rank Correlation co-efficient

Unit II: Simple Linear Regression Analysis/Models

Introduction to Simple Linear Regression Models- Regression vs. Causation- Properties & Estimation of Regression Coefficients- Coefficient of Determination

Unit III: Multiple Linear Regression Models

Introduction to Multiple Linear Regression Models- Properties & Estimation of Partial- Regression Slope Coefficients- Multiple Coefficient of Determination

Unit IV: Time Series Analysis:

Concepts and components of time series data- measurement of trends – Graphical, moving, average, least squares method and fitting of linear trend curves.

Unit V: Minor Assignment

Estimate, analyze and draw inference on an economic data using any of the statistical tools in the syllabus.

Reference

1. Aggarwal. Y.P (2002), *Statistics Methods – Concepts Application and Computation*, Sterling Publishers Private Ltd., New Delhi.
2. Gupta, S.P. (1993), *Fundamentals of Applied Statistics*, S. Chand & Sons, New Delhi.
3. Speigal, M.R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book Co., London.
4. Whigham, David, (2008), *Business Data Analysis Using Excel*, Oxford University Press.
5. Wonnacott H. Thomas & Wonnacott J. Ronald (1969), *Introductory Statistics*, John Wiley & Sons, Inc. New York.
6. Timothy C. Urdan (2005), *Statistics in Plain English, Second Edition*, Lea Lawrence Erlbaum Associates Publishers, London.

Non Major Elective 2: INDIAN ECONOMY FOR COMPETITIVE EXAMINATIONS

Learning Outcomes:

To enable the students

- **To acquire the knowledge of the factors of development for policy making**
- **To understand the structural changes, regional disparities in terms of National Income and the impact of demographic profile on poverty and unemployment**
- **To assess the role of agricultural and industrial development and its impact on foreign trade and balance of payments**
- **To know the new economic policy and its implications, role of fiscal and monetary policies in an economy and the working of the Indian Financial System**

Unit-I

Economic Development – Measurement of Development – Cause of under development– Planning and Economic Development- Development and infrastructure.

Unit-II

National Income – Structural changes – Regional disparities – Population Growth – Poverty – problem of unemployment.

Unit III

Agricultural development – Food policy – Industrial development – India's foreign trade – India's Balance of Payments.

Unit IV

Industrial policy – New economic policy – Fiscal and Monetary Policies – Indian Financial System.

Study Materials:

- 1. Gaurav Dutt and Ashwini Mahajan- Indian Economy, S. Chand and Sons, 72nd Edition**
- 2. Jhingan, M.L. The Economic of Development & Planning, Vrinda Publications, 2019 Edition.**
- 3. Ahuja, H.L. Economic Environment of Business, Macro Economic Analysis, S. Chand and Sons**
- 4. General Studies Manual for the UPSC Civil Services Preliminary Examination (Latest Edition).**
- 5. Indian Economy Exam Oriented Series–Pratiyogita Darpan.**

Semester III

Core Paper I –Indian Economy I

Learning Outcomes:

- **understand and dimension of Indian Economic Problems**
- **understand the population dynamics and importance of demographic dividend of an economy**
- **understand the need for formulation of strategies of planning for reforming economies**
- **appreciate the vital link between agriculture credit and farm productivity in Agriculture**
- **appreciate the impact of unemployment, and fluctuating price indices, and economic disparities on a growing economy**

UNIT-I

Economic development and growth-Basic characteristics of the Indian economy-major issues of development-obstacles to development.

UNIT-II

Structure of Indian economy-National income – sectoral contribution and economic transition in India - -natural resources in the process of economic development population size and growth –demography composition – new population policy

UNIT-III

Objectives of planning in India –development strategy in India-broad achievements and failures-new economic reforms –liberalization, privatization and globalization-rationale behind economic reforms-progress of privatization and globalization.

UNIT-IV

The place of agriculture in the national economy-trends in production and productivity in agriculture –green revolution-progress of agriculture under the five year plans –land reforms –rural credit –agricultural marketing and food security in India.

UNIT-V

Poverty and inequality in India –unemployment in India-causes for rising of prices –regional disparities in India.

References

1. Ahluwalia, I. J. and IMD Little (Eds.) (1998). *India's Economic Reforms and Development*, Oxford University Press, New Delhi.
2. Byres, T.J. (Ed.) (1997), *The State, Development Planning and Liberalization in India*, Oxford University Press, New Delhi.
3. Byres, T.J. (Ed.) (1998), *The Indian Economy: Major Debates Since Independence*, Oxford University Press, New Delhi.
4. Kausik Basu (Ed.) (2012), *Oxford Companion to Indian Economy*, 3rd Edition, OUP, New Delhi.
5. Uma Kapila (Ed.) (2017-18) *Indian Economy Since Independence*, Academic Foundation, New Delhi, 28th Edition.
6. Ashima Goyal (Ed.) *The Oxford Handbook of the Indian Economy in the 21st Century: Understanding the Inherent Dynamism*, Oxford University Press.

Core Paper- VI

Mathematics for Economists

Learning Outcomes:

- **The student should acquire computational skills- calculation of derivatives and solve problems in optimization**
- **Analytical skills- capable of identifying tools required to solve specific problems/ economic issues.**
- **Acquire broad understanding of maximization and minimization techniques.**

Unit I

Vector and Matrix Algebra - Basic Operations - Types of Matrices – Transpose of a Matrix – Properties of Transpose – Partitioned Matrices – Minor and Rank of a Matrix.

Unit II

Determinants – Singular, Non Singular Matrix – Adjoint Matrix – Inverse Matrices – Properties of Inverse – System of Equations with Inverse – Cramer's Rule.

Unit III

Differentiation – Rules of Differentiation: Differentiation of Sum and Difference of functions – Product Rule – Quotient Rule – Chain Rule – Higher Order Derivatives – Direct and Cross Partial Derivatives.

Unit IV

Maximization and Minimization – Economic Applications: Revenue Maximization – Profit Maximization under Perfect Competition, Monopoly, Discriminating Monopoly – Cost Minimization.

Unit V

Integration – Rules – Definite Integrals – Properties of Definite Integrals – Economic Applications: Consumer's Surplus and Producer's Surplus.

References:

- 1. Chiang. A. C. (2005), Fundamental Methods of Mathematical for Economics, McGraw Hill, New York.**
- 2. Edward T Dowling (2011), Schaum's Outline of Introduction to Mathematical Economics, 3rd Edition, McGraw Hill Publication.**
- 3. Geoff Renshaw(2009), Maths for Economics, 2nd Edition, Oxford Publications, New Delhi**
- 4. Jean E. Weber (1982), Mathematical Analysis, Business and Economics Applications, Harper International Edition, Cambridge, March 1.**
- 5. Mabbet, A.J. (1986), Workout Mathematics for Economists, Mac Millan Master Series, 4th Edition, London.**

Semester IV
Core Paper –VII
INDIAN ECONOMY-II

Learning Outcomes:

- **To appreciate the changing perspective with regard to industrialisation and policy prescriptions to enhance development.**
- **Students will be competent to analyse the cause for industrial disputes, and find out the measures for social security.**
- **Students will be capable of acquiring the ability to examine the role of trade policy and foreign trade, and know about the composition of foreign trade.**
- **The students can learn about the wide ranging impact of policy changes made by RBI and other financial institutions**
- **Obtain an overview about the revenue and expenditure of both Central and State Government and gives knowledge about the revenue sharing formula recommended by Finance Commission.**

UNIT-I

The role of industrialization-review of industrial growth under planning-small scale industries; role, problems, and policy perspective to help small scale industries-industrial policies; 1956,1977 and 1991.

UNIT-II

Features of industrial labour- causes for industrial disputes –social security measures – unorganised sector and India’s informal economy –agricultural workers in India.

UNIT-III

Importance of foreign trade for a developing economy-composition and direction of India’s foreign trade- role of FDI-BOP crisis- India’s trade policy.

UNIT-IV

Financial sector reforms – organisation of India’s money market –changing roles of RBI-development financial institutions –Indian capital market and SBEI

UNIT-V

Trends in revenue and expenditure of central and state Governments-deficit finance in India-current year budget of government of India-finance commission-federal finance in India.

References

1. **Ahluwalia, I. J. and IMD Little (Eds.) (1998). *India’s Economic Reforms and Development*, Oxford University Press, New Delhi.**
2. **Byres, T.J. (Ed.) (1997), *The State, Development Planning and Liberalization in India*, Oxford University Press, New Delhi.**
3. **KausikBasu (Ed.) (2012), *Oxford Companion to Indian Economy*, 3rd Edition, OUP, New Delhi.**
4. **Uma Kapila (Ed.) (2017-18) *Indian Economy Since Independence*, Academic Foundation, New Delhi, 28th Edition.**
5. **AshimaGoyal(Ed.) *The Oxford Handbook of the Indian Economy in the 21st Century: Understanding the Inherent Dynamism*, Oxford University Press.**

Core Paper VIII

ECONOMETRICS

Learning Outcomes

- Understand how to use regression analysis to infer causal relations of economic variables
- Understand the economic implications and the relevance of the tools required to formulate simple econometric models

Unit 1

Introduction to Econometrics – Definition and Scope – Divisions of Econometrics – Methodology of Econometrics – Types of Econometrics

Unit 2

Simple Linear Regression Model-Two Variable Linear Regression Model - PRF and SRF - Methods of OLS - Classical Linear Regression Model – Assumptions- Gauss Markov Theorem- Best Linear Unbiased Estimator(BLUE) - Derivation of OLS estimator and its properties

UNIT 3

Hypothesis testing- Coefficient of determination - Standard Error – Confidence Intervals

Unit 4

Estimation of the model by OLS method

Estimation of a two variable model

Three Variable Linear Regression Model – Partial Regression co-efficients

Functional form of regression models: Double Log, Semi Log, Reciprocal models

Unit 5

Econometric Model with Quantitative Independent Variables

Introduction to Dummy Variables - Regression using Dummy Variables

Testing for structural stability of regression models - Interaction Effects - Seasonal Analysis

REFERENCES:

1. Damodar N, Gujarati. & Sangeetha. S. (2007), Basic Econometrics, 4 th edition, McGraw Hill Publications, . New Delhi.
2. Damodar N, Gujarati. (2011), Basic Econometrics by Example, 1st edition: Palgrave Macmillan India
3. Christopher, Dougherty. Introduction to Econometrics (2011), 4 th edition, Oxford University Press, London.
4. Dominick, Salvatore. & Derrick. (2011), Reagle. Statistics and Econometrics, Schaum's Outlines 2 nd edition. McGraw Hill, New York.
5. Koutsoyiannis, A. (1977), Theory of Econometrics, 2nd edition. Macmillan Press, London.
6. Maddala.G.S (1997),Econometrics McGraw Hill, New York

Semester V
Core Paper- IX
Macro Economics– I

Learning Outcomes:

Students will acquire

- **Knowledge about the working of macro-economic parameters of an economy**
- **An understanding and measurement of national income and social accounting concepts and their importance**
- **An insight into the basic tenets of classical and Keynesian theory of output and employment in understanding economic fluctuations**
- **An idea about the implication of consumption theories in enhancing growth**
- **To appreciate the impact of changing interest rates on investment.**

Unit I:

Nature of Macro Economics - Difference between Micro and Macro Economics- Macro Statistics and macro dynamics – transition from micro economics to macroeconomics.

Unit II:

National Income – concepts of national income – methods of measuring of national income – Difficulties in measurement of national income – importance of national income analysis – social accounting – components and importance of social accounting.

Unit III:

Classical theory of output and employment –J.B Say's Law of Markets- Keynesian Theory of output and employment – Wage rigidity – Derivation of aggregate Supply curve – Aggregate Expenditure function – Effective demand

Unit IV:

The consumption function – meaning of consumption function – technical attributes of consumption function – determinants of the consumption function - Keynesian Consumption function –Relative Income hypothesis – Permanent Income Hypothesis - Life Cycle Hypothesis.

Unit V:

Investment function – definition – induced and autonomous investment – determinants of investment – MEC and MEI and rate of interest – factors other than the interest rate affecting inducement to invest.

References:

1. **Dornbusch, Rudiger, Stanley Fischer, and Richard Startz (2000). Macroeconomics, Tata McGraw-Hill Publishing Company, New Delhi.**
2. **Roger E.A. Farmer (2002), Macro Economics, Thompson Asia Pvt. Ltd., Singapore**
3. **Jha, Raghendra (1991). Contemporary Macroeconomic Theory and Policy, Wiley Eastern Limited, New Delhi.**
4. **Laidler, David E.W. (1977). The Demand for Money: Theories and Evidence, Harper and Row, New York.**
5. **Mueller, M.G. (Ed.)(1978). Readings in Macroeconomics, Surjeet Publications, New Delhi.**
6. **Mankiw. N Gregory (2000) Macro Economics (Worth Publishers, New York)**

Core Paper- X
Public Finance – I

Learning Outcomes:

- **To understand the importance of public finance in economic development and able to differentiate private and public in terms of finance and goods.**
- **In depth knowledge in public expenditure especially the significance and effects of increase in public expenditure. Also to study the economic views of public expenditure.**
- **Insight knowledge on various sources of public revenue and to understand the ways in which direct and indirect taxes are levied for augmenting financial resources towards economic development.**
- **To study the theoretical underpinnings behind the shifting and incidence of taxes.**
- **To understand the concept of taxable capacity with its importance, types and measurements.**

Unit I:

Public finance – Meaning and Scope – Public and Private Finance – Principle of Maximum Social Advantage – Public Goods and Private Goods.

Unit II:

Meaning and Definition of Public Expenditure – Reasons for the Growth of Public Expenditure – Views of Economists on Public Expenditure: Wagner’s Hypothesis and Peacock – Wiseman Hypothesis, Canons of Public Expenditure – Effects of Public Expenditure

Unit III:

Sources of Public Revenue – Taxes – Canons of Taxation—Principles of Taxation Classification of Tax – Direct and Indirect taxes—A brief note on different taxes – GST in India - Effects of Taxes.

Unit IV:

Shifting and Incidence of Taxes – Theories of Shifting and Incidence – Concentration theory – Diffusion Theory – Modern Theory of Incidence

Unit V:

Meaning – Factors determining Taxable Capacity – Types of Taxable capacity – Significance – Limits of Taxable Capacity – Measurement of Taxable Capacity.

References:

1. **David.N.Hyman(2005),Public Finance: A Contemporary Application of Theory and Policies,Cengage India Edition, New Delhi**
2. **Holley Ulbrich, (2003), Public Finance in Theory and Practice, Thomson South-Western, Chennai.**
3. **Lekhi R.K and Joginder Singh (2015), Public Finance, Kalyani publishers, Delhi.**
4. **Musgrave. Richard and Peggy.Musgrave, (2017), Public finance in Theory and practice, Mcgraw-Hill Publications**
5. **Rosen, Harvey(2013),Public Finance, McGraw Hill Publications**
6. **Pinaki Chakraborty, GST in India, Orient Blackswan, 2019**

Core Paper-XI

International Economics

Learning Outcomes

- **To understand the fundamental conceptual framework through theories of international trade**
- **Application of the concepts to evaluate decisions with regard to international trade**
- **To validate arguments and reassess need for protection or open up trade to assess the effects of tariff and non-tariff barriers**
- **To examine the functioning and causes of balance of payments conundrum and to enhance trade flows and design schemes for evaluation**
- **To be aware of the functions and working of international financial institutions to ensure free to orderly flow of cross border flows.**

Unit I

International Trade –Meaning –Difference between International and Inter-Regional Trade – Community Indifference Curve – Production Possibility Curve – Offer Curves –Opportunity Cost.

Unit II

Theories of International Trade: Adam Smith (Absolute Advantage) – David Ricardo (Comparative Cost Advantage) –Heckscher - Ohlin Theorem— Heberler (Opportunity Cost Theory) - J.S. Mills (Reciprocal Demand Theory).

Unit III

Free Trade – Protection – Meaning – Cases for and against Free Trade and Protection – Quotas: Meaning and Types. Tariff: Meaning, Types and Effects.

Unit IV

Balance of Payments – Meaning - Structure of Balance of Payments – Causes of Disequilibrium – Measures to Control Disequilibrium. New International Economic Order – Objectives and Implementation.

Unit V

IMF – World Bank – WTO –Regional Trade Agreements–ASEAN-Euro Zone-G20 –Asian Development Bank – BRICS – Recent Summits –Trading Blocs –SAARC – NAFTA – EU.

References:

1. **Charles P Kindleberger (1999), International Economics, Macmillan Press Ltd London.**
2. **Dominick Salvatore (2014), International Economics, John Wiley International Student Edition.**
3. **Paul Krugman, Maurice Obstfeld and Marc Melitz, Addison (2014) – Wesley International Economics: Theory and Policy, Pearson Education Indian Edition.**
4. **Robert Carbaugh (2016), International Economics, Cengage Learning.**

Core Paper-XII

Development Economics

Learning Outcomes:

- To understand about the economic development and economic growth and also knowing economic indicators.
- To gain knowledge the various growth models.
- To obtain knowledge of the social evils like poverty, income inequalities.
- To gain knowledge of the international trade and economic growth and Sources of international finance.

Unit I

Definition of Economic Development and Economic Growth – Distinction between economic growth and economic development – Factors Contributing to Development and Growth: Institutional, Technological, Economic and non-economic factors – Measuring Development –GDP – PQLI – PPP - HDI.

Unit II

Rostow's Stages of Economic growth –Balanced Vs Unbalanced growth- Nurkse Theory of Balanced Growth -Hirshman's theory of unbalanced growth- Rosenstein Rodan's Big Push theory– Lewis' dual sector model - Leibenstein's Critical Minimum Effort thesis.

Unit III

Issues of Development: Income Distribution – Measuring inequality – Inequality in income and growth – The inverted U Hypothesis -Externality – Environmental Kuznet's Curve – Sustainable Development.

Unit IV

Poverty cycle – Conceptual issues –Measurement of Poverty –Range – Coefficient of Variation –Head count - Head Count Ratio – Poverty Gap Ratio – Lorenz Curve – Gini Coefficient – Sen's Index on Poverty – Functional Impact of Poverty.

Unit V

International trade and economic growth – Import Substitution and Export Promotion Meaning and types of international capital movement – Role of Foreign Direct Investment in economic development. – Foreign aid and economic development – Types of foreign aid

References:

1. Adelman Irma (1961), **Theories of Economic Growth and Development**, Stanford University Press.
2. Debraj Ray (1998), **"Development Economics"** Princeton University Press, New Jersey.
3. Gerald M. Meier, James E. Rauch, **Leading Issues in Economic Development**, Oxford University Press, 7th edition (2000).
4. Thirwall A.P (1989), **Growth and Development**, Palgrave Macmillan; 4th Ed.
5. Wayne Nafziger E (2012), **Economic Development**, Edition 5, Cambridge University Press.

Semester VI

Core Paper-XIII: Macro Economics – II

Learning Outcomes:

- To assess the impact of investment on increasing employment, output and consumption through the concept of multiplier
- To understand the equilibrium between product and factor markets.
- Understand several key models and concepts of monetary economics.
- Demonstrate an understanding of economic fluctuations and policy measures to withstand economic shocks
- Appreciate the role, value and limitations of monetary and fiscal policies in handling economic fluctuations.

Unit I

Multiplier – employment and investment multiplier – leakages of multiplier – uses and limitations of multiplier – principles of accelerator and super multiplier.

Unit II

General Equilibrium – Equilibrium of commodity market (IS) and Money Market (LM) – Simultaneous equilibrium of commodity and money market (IS-LM) Changes in general equilibrium.

Unit III

Money – Fisher's quantity theory of money – Cambridge equations – Keynesian theory of money – money supply – determinants of money supply – high power money and money multiplier.

Unit IV

Business cycles – types – phases and effects of business cycle – inflation – Philips curve – causes and measures to control inflation.

Unit V:

Macro-Economic policy: objectives – monetary policy – objectives – instruments – effectiveness of monetary policy – fiscal policy – objectives – monetary and fiscal mix to control inflation

References:

1. Dornbusch, Rudiger, Stanley Fischer, and Richard Startz (2000). **Macroeconomics**, Tata McGraw-Hill Publishing Company, New Delhi.
2. Roger E.A. Farmer (2002), **Macro Economics**, Thompson Asia Pvt. Ltd., Singapore
3. Jha, Raghendra (1991). **Contemporary Macroeconomic Theory and Policy**, Wiley Eastern Limited, New Delhi.
4. Laidler, David E.W. (1977). **The Demand for Money: Theories and Evidence**, Harper and Row, New York.
5. Mueller, M.G. (Ed.)(1978). **Readings in Macroeconomics**, Surjeet Publications, New Delhi.
6. Mankiw. N Gregory (2000) **Macro Economics** (Worth Publishers, New York)

Core Paper-XIV- Public Finance - II

Learning Outcomes :

- **Understand the concept of public debt with its causes, effects and management.**
- **Depth knowledge in the concept of fiscal federalism, finance commission and NITI AYOOG**
- **Acquire more knowledge on the concept of deficit financing and its causes and effects in an economy.**
- **More knowledge in the framework of budget and overview of current Union Budget.**
- **Understand the major functions of local government sources of finance and the problems faced by it.**

Unit I:

Public Debt - Meaning — Comparison of Private and Public debt – Objectives of Public debt – Classification of Public Debt , Causes, Effects and Redemption of public debt – Public debt management in India

Unit II:

Meaning – Principles of Fiscal Federalism – Objectives of Finance Commission – Recommendations of 13th, 14th and 15th Finance Commission – Co-operative Federalism-NITI Aayog - Centre State Financial Relations.

Unit III:

Meaning – Objectives –concepts of Deficit Financing- Causes of Deficit Financing – Impact of Deficit financing – Advantages and Disadvantages of Deficit Financing.

Unit IV:

Meaning and Definition of Budget – Objectives of the Budget – Structure of the Budget – Budgetary procedure in India – An overview of Current Union Government Budget.

Unit V:

Local Governments – Types of Local Governments – Sources of Finance of Local Governments – Functions of local governments – Problems faced by Local Governments with regard to Finance

References:

1. **David.N.Hyman(2005),Public Finance: A Contemporary Application of Theory and Policies, Cengage India Edition, New Delhi**
2. **Holley Ulbrich, (2003), Public Finance in Theory and Practice, Thomson South-Western, Chennai.**
3. **Lekhi R.K and Joginder Singh (2015), Public Finance, Kalyani publishers, Delhi.**
4. **Musgrave. Richard and Peggy.Musgrave, (2017), Public finance in Theory and practice,McGraw Hill Publications**
5. **Rosen, Harvey(2013),Public Finance, McGraw Hill Publications**

Core Paper: XV
Monetary Economics

Learning Outcomes

- It enables the students to understand the nature, basic concepts, scope and importance of money
- It capacitates the students to have a thorough understanding of the various functions of money.
- The students get an insight in to the different schools of thought regarding the demand for money and supply of money.
- It enables the students to gets awareness of the different types, causes and effects of inflation and deflation
- To familiarize the students with the different classification of banks and the evolution of banks.To understand working & operation of RBI.
- To know the structure and working of money market, capital markets and also determination of foreign exchange
- To create awareness of the monetary policy formulations, its targets and objectives

Unit I

Money in Economic System – Functions of Money-Evolution of Money – Types of Monetary Standards.

Unit II

Demand for Money: Quantity Theory-Classical, Cambridge equations and Keynesian Liquidity Preference –Friedman's Restatement Quantity theory of Money – Supply and composition of money – determinants of money supply -Money Multiplier.

Unit III

Commercial Banks – Functions and Operations-Credit Creation –Reforms in the Indian Banking System –Issues of NPA-Reserve Bank of India: Functions and Working – demonetization in India – objectives - implications

Unit IV

Money Market - Structure and Functions – Features of Indian Money Market – Role of unorganized money markets in India. Capital Market :Primary and Secondary Markets –SEBI and Capital Markets – Foreign Exchange Market – Types and determinants

Unit V

Monetary Policy: Objectives, Instruments of Credit Control measures – Transmission Process – Working of monetary policy in developed and developing countries.

References:

1. **Goldfield and Chandler (1959) The Economics of Money and Banking,H & R Publication.**
2. **Jagadish Handa: Monetary Economics, Routledge; 1st Edition (18 September 2008)**
3. **Pierce and Shaw, (1985), Monetary Economics: Theories, Evidence and Policy, Butterworth-Heinemann Ltd; 2nd revised edition**
4. **R.Cauvery, N.Kruparani, U.K,Sudhanayak, A.Manimekhalai, (2012), Monetary Economics, S.Chand and Company limited.**
5. **R.R.Paul, (2013), Monetary economics, Kalyani Publishers, New Delhi**
6. **Vaish M C (1985), Money, Banking, Trade and Finance, Wiley Eastern Publication.**
7. **C. Rammanohar Reddy, Demonetization and Black Economy, Orient Blackswan, 2019**

LIST OF ELECTIVE PAPERS

Allied Paper 1: a) HISTORY OF ECONOMIC THOUGHT

Learning Outcomes

- To trace the evolution of economic science and evaluate the contributions of various thinkers and schools of thought
- The student should conceptualize the evolution of economic ideas and hence forth identify the ideology of different schools of thought
- Critical thinking- contextual analysis of theories and its relevance
- Writing and presentation Skills engage in academic debates/ intellectual exercise

Unit 1

Introduction to the History of Economic Thought – Meaning, Need for study of Economic Thought - Origin of Modern Economic Thought –Mercantilism –Physiocracy

Unit 2

The Classical Political Economy - Adam Smith- David Ricardo - Thomas Robert Malthus- J.S.Mill

Unit 3

Alternative Schools of Thought - Marxian Socialism-Institutional School –Thorstein Bunde Veblen- German Historical School –Critical and Positive ideas- Marginal Revolution –William Stanley Jevons –Carl Menger –Leon Walras- Neo Classical Economics –Main Features –Alfred Marshall – Critique of Neoclassical School

Unit 4

Keynesian Economics- Main Features of Keynesian Revolution – Contributions of Lord Keynes to Macro Economics -Welfare School –Vilfred Pareto

Unit 5

Indian Economic Thought - Dadabhai Naoroji- Mahadev Govind Ranade - Gopalakrishna Gokhale - M. K. Gandhi

REFERENCES:

1. **Dasgupta, Ajit(1993). A History of Indian Economic Thought, Routledge, London New York .**
2. **Lokanathan V.(2007), A History of Economic Thought, S. Chand, New Delhi New Delhi.**
3. **Haney, Lewis H. (1962) History of Economic Thought, The Macmillan,New York.**
4. **Paul.R.R (2014), History of Economic Thought, Kalyani Publications.**
5. **Roll, Eric (2006), History of Economic Thought. Faber, London.**
6. **Agnar Sandmo,(2010), Economics Evolving: A History of Economic Thought, Princeton University Press.**

Allied Paper : I (b) Introduction to Operations Research

Learning Outcomes:

- **Formulate and solve problems as networks and graphs**
- **Develop linear programming models**
- **Skills in analysis of operations research objectives**

Unit 1

Introduction - Nature and scope of Operations Research - Transportation Model - Definition - Methods of finding Initial Basic Feasible Solution - North-West Corner Rule, Least Cost Method, Vogel's Approximation Method - Solution of a Transportation Problem – MODI Method – A note on Unbalanced Transportation problem - Assignment Problem – Hungarian Method

Unit 2

Structure of Decision Making Problems - Types of decision making - Decision making under Uncertainty - Maximin, Minimax, Maximax, Hurwicz and Minimax regret criteria - Decision Making under Risk – Expected Value Criterion, Expected Opportunity Loss Criterion, Expected Value Perfect Information – Decision Tree Analysis

Unit 3

Meaning, Objectives and Types of inventory - Factors affecting inventory control - Benefits of inventory control - Economic order quantity models – Quantity discount models

Unit 4

Meaning, objectives and Basic Components of a Network - Management applications of network analysis - Construction of network for projects – problems - Network computations - Earliest completion time of a project - Critical Path Method - Program Evaluation Review Technique

Unit 5

Queuing Theory : Meaning - Benefits - Elementary Queuing System - Arrival Pattern - Queue and Service Facility - Single Server and Multi Server Models

BOOKS RECOMMENDED

- 1. Richard Bronson and Govindasamy Naadimuthu - Operations Research (Schaum's Outlines)**
- 2. Wagner .H - Principles of Operations Research**
- 3. Philip D.T. and Ravindran A., "Operations Research", John Wiley, 1992.**
- 4. Taha H.A., "Operations Research", Sixth Edition, Prentice Hall of India, 2003.**
- 5. Kapoor V.K. - Operations Research - Sultan Chand & Sons**
- 6. Gupta P.K. &Hira D.S- Operations Research and Quantitative Analysis - S. Chand & Co. Ltd.**
- 7. T. Veerarajan, Operations Research, University Press, 2017**

ALLIED PAPER II- (a) HEALTH ECONOMICS

LEARNING OUTCOMES

- To understand the students, health is one of the important indicators of human development.
- To highlight the need of health care services supply and demand both private and public sector.
- To enables the students the key concepts of health and evaluation of health care system
- To assess and the performance of health indicators and its implications
- This paper is to create awareness of health care and health insurance
- It also helps to understand health industry and tourism
- This paper also enlighten them to live with hygiene and its boost to importance of human development in particular and overall economic development in general.

Unit I: Health and Economic Development- Investment in man -Health and Social Welfare- Determinants of Health- Income and Health Linkages- Economic Analysis of Health care.

Unit-II: Demand for Health Care Services- Preference for Health care using Indifference Curves- Budget Constraints- Income and Price effects for Health care- Elasticity of Demand for Medical care.

Unit-III: Supply of Health care services- Physicians and Medical Personnel as Health care providers- Non labour inputs- Hospitals- Interaction of Demand and Supply of Health care.

Unit-IV: Health Indicators- Birth rate- Fertility- Morbidity- Mortality- IMR – CMR- MMR- Disability Adjusted Life Year (DALY)- Quality Adjusted Life Year (QALY)- Sex ratio.

Unit- V: Health Insurance- Medical Ethics- Medical Tourism.

BOOKS FOR REFERENCE:

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. M. Grossman, 'The Shadow price of Health in the Economics of Health' Vol. 1 by A.J. Culyes (ed) (1991), Edward Elger publishing Ltd, UK.
4. Volan Brian (1993) Economics Incentives, Health Status and Health services, Utilisation, Journal of Health Economics, Vol II.
5. Banerjee, D. (1975), Social and Cultural Foundations of Health Service Systems of India, Inquiry, Supplement to Vol. XII, June.
6. Edwin G Dolan and John C Goodman: Economics of Public Policy: 4th Edition: West Publishing Company, New York

ALLIED PAPER II- (b) COMPUTER APPLICATIONS IN ECONOMICS

Learning Outcomes:

- **Provide skills to describe, interpret, explore and analyse data.**
- **Introduce simple statistical and econometric methods to analyse data**
- **Understand the economic relevance**
- **Demonstrate computer proficiency within the field of economics.**

Unit I:

Working with MS EXCEL- Starting EXCEL- Workbook, Worksheet/Spreadsheet- Calculation Operators- Arithmetic Operators- Comparison Operators- Logical Operations- Excel Tool Bars

Unit II:

Descriptive Analysis- Measures of Central Tendency – Minimum, Maximum, Sum, Mean, Median, Mode- Measures of Dispersion – Range, Standard deviation, Variance- Measures of deviation from Normality – Skewness, Kurtosis- Frequency Distributions – Univariate, Bivariate- Frequency Polygons – Ogives.

Graphical Illustrations:

Column/Bar Diagram- Histogram- Pie diagram- Line Graphs- Scatter Plot- Stock Diagram
Radar Diagram.

Unit III:

Measures of Linear Relationships – Estimation & Hypothesis Testing - Correlation – Simple, Partial & Multiple- Coefficient of Determination- Regression – Simple & Multiple- Regression & ANOVA

Unit IV:

Functional Forms (Non-Linear Relationship)- Double Log Model – Estimation of Elasticity measure- Semi-log Model – Estimation of Growth Rates- Reciprocal Model – Estimation of Asymptote values- Regression on Dummy variables

Unit V:

Hypothesis Testing – Significance of Means- Student's t Test- ANOVA (one-way & two-way)

Reference Books:

- **Microsoft Excel 2016 Bible: The comprehensive tutorial resource by John Walkenbach, John Wiley and sons Inc.2013**
- **Jeffrey M Wooldridge, Introduction to Econometrics 3rd Edition, Pearson Publishers**
- **Basic Econometrics, Damodar N Gujarati**

Allied III: Semester III

a. Rural Economics

Learning Outcomes:

- To understand the concept of Rural Economy
- To gain knowledge about the Rural employment, issues of unemployment and Policies
- To obtain knowledge about the Agricultural Marketing, pricing policies, financial issues and financial institutions.
- To know the Rural Development Programmes and Policies of the government
- To obtain knowledge about the Rural Industrialisation opportunities.

Unit I

Nature- Scope and Factors determining Rural Economy- Characteristics of Rural Economy - Social Aspects of India's Rural Areas - Barter System - Non-monetized Sector - Economic Characteristics - Land and Asset Distribution - Agricultural Income - Vagaries of Monsoon.

Unit II

Rural Unemployment - Types and Magnitude , Agricultural Labour – Marginal Productivity – Agricultural Wage – Minimum Wages Act, Rural Employment Programmes – MGNREGA – Rural Poverty – Nature, Causes and Consequences – Poverty Alleviation Programmes.

Unit III

Agricultural Marketing – Minimum Support Price linked to Production Cost - Agriculture Marketing Development – eNAM system (online Agriculture Market Place) Crop Insurance - Rural Finance - Causes and magnitude of rural indebtedness, Sources of rural credit: Unorganized: Money lenders, Indigenous Bankers, Organized: Co-operatives, Commercial Banks, Regional Rural Banks – NABARD.

Unit IV

Rural Development Programmes –Pradhan MantriSadak Yojana - PradhanMantriAwaasYojana –National Rural Health Mission – National Rural Livelihood Mission.

Unit V

Rural Industrialization - Agro-based Industries – Cottage Industries, Rural artisans - Cooperative societies – Rural Marketing. Cooperative Marketing-Role of Self Help Groups – PURA Model – Recent Government Policy for Rural Development.

References:

1. Agarwal A.N., KundanLal, (1990), Rural Economy of India, Vikas, Delhi.
2. Choudry. C.M, (2009) Rural Economics- Jaipur- Sublime Publication
3. DhingraI.C., (2010), The Indian Economy, Sultan Chand, New Delhi.
4. L.C. Jain, (1985), Grass without Roots: Rural Development Under Government Auspices, Sage Publications, New Delhi.
5. Patel, K.V, Shan A.C, and Mello L.D, (1984), Rural Economics, Himalaya, Mumbai.
6. Prasad B.K. Rural Development, (2003), Concept, Approach and Rural Strategy.

b. Tourism for Development

Learning Outcomes

- **This subject aims to introduce to the students the vibrant tourism industry.**
- **It highlights the role of tourism as an economic intervention and its significance in economy.**
- **It also discusses the global nature of the tourism Industry.**
- **It traces the impact of the tourism as a factor for development in all fields, viz., socio-economic, ecological impacts.**
- **The subject emphasises on various tourism organization that brings about its development.**

Unit I

Tourism: Concepts: Definitions and Historical development of tourism; Types of tourist-Visitor and Excursionist, Types and Forms of Tourism;-Tourism system: Nature and characteristics. Domestic tourism; features, pattern of growth, profile. International tourism

Unit II

Tourism Impacts: Impacts: Positive and Negative Impacts of Tourism; Socio-Cultural, Economic, Environmental and Political - Impact Assessment: Social Impact Assessment, Environmental Impact Assessment and Environmental Impact Assessment.

Unit III:

Employment and Income creation, Tourism Multiplier Effects, Balance of Payments, Foreign Exchange

Unit IV

Tourism Organizations: Objectives and Role of UNWTO, ITDC & TTDC, Ministries of Railways-IRCTC and Civil Aviation in development; An overview of National and International organizations and associations: IATO, ICAO and IATA

Unit V

Economic transition in post independent India-A quick review- Tourism Development during the Plan Periods-Effect of liberalization-Tourism and privatization-Globalization of the Tourism Industry.

References

- 1. Bhatia, A.K., (1982), Tourism Development and Principles, New Delhi, Sterling Publishers.**
- 2. Bhatia, A.K., (1978), Tourism in India, New Delhi, Sterling Publishers.**
- 3. Negi, Jagmohan and Mabohel, Gaurav N., (1998), India 50 years of Independence- 1947-97 – status and growth & development – Tourism, New Delhi, B.R. Publishing Corporation.**
- 4. Seth Praveen, (1999), Tourism: Today and Tomorrow, New Delhi, Anmol Publications.**
- 5. Singh, P.K., (1998), Fifth Year of Indian Tourism, New Delhi, Kanishka Publishers.**

Entrepreneurial Development

Learning Outcomes

Student will acquire

- **Knowledge of entrepreneurial development (ED) and its significance towards creating self-employment in the country.**
- **Information about various types of entrepreneurs such as first, second and third generation entrepreneurs.**
- **Knowledge of other types like women and rural entrepreneurs in India.**
- **Focus regarding formation of business proposal and drafting of project report.**
- **Information relating to financial institution towards funding to EDP and government subsidies towards entrepreneurial progress in India.**

Unit I

Meaning of entrepreneur – need, importance and characteristics of an entrepreneur. Types and classification of entrepreneur – first generation, second generation and third generation entrepreneurs. Women entrepreneurs – special features and issues- Rural entrepreneurs – characteristics and problems.

Unit II

Problems and issues faced by Indian entrepreneurs – government measures towards entrepreneurial issues. Policies and programs on entrepreneurial development. Industrial policy and its focus on EDP and SSI.

Unit III

Small scale entrepreneurs – SSI, Micro Units, Start-ups, Venture Capital and Self-help groups. Roll and significance of SSI and micro units for economic development. Incentives and subsidies to SSI in India.

Unit IV

Formation of business idea. Project and its classification, project appraisal and feasibility report. Content in project report.

Unit V

Entrepreneurial programs in India – EDP cell, DICs, KVIC, TRYSEM, SIDO and other national, state and district level development programs. Roll of funding institutions – SFC, SIPCOT, SISI, IFCI, IDBI ICICI and NSDC.

Books for Study

1. **Bhattacharys. H, “Entrepreneurial Development”, S. Chand, 2007**
2. **Casson Mark, “The Entrepreneur”, Encyclopedia of Economics, 2nd edition.**
3. **Gupta C. B and Srinivasan N.P, “Entrepreneurship development in India”, S. Chand, 2006**
4. **S. S Khanka, “Entrepreneurial Development”, S. Chand, 2012.**

Books for References

1. **Jayashree Suresh , “Entrepreneurship Development”, Margham Publications, 2012.**
2. **Marc J. Dollinger, “Entrepreneurship strategies and resources”, Marsh Publications, U.S.A. 4th Edition**
3. **Vasanth Desai, “Entrepreneurial Development”, Himalaya Publishing House, 2009**

Allied IV: Semester IV

a. Tamil Nadu Economy

LEARNING OUTCOMES:

- **To understand the growth and development aspects of Tamil Nadu State economy.**
- **To gain knowledge about demographic structure of Tamil Nadu, population policy, employment issues and poverty.**
- **To understand the basics of cropping pattern, irrigation, marketing, food security and PDS**
- **To understand the trends in industrial development in Tamil Nadu and the roles of SSI, TIDCO, TANSI, SIPCOT, DIC in promoting industrial growth**
- **To gain knowledge on the role of transport system and energy sector in promoting economic development of Tamil Nadu**
- **To understand the importance of health, education and environmental knowledge.**

Unit I

Growth and development- Ingredients of economic growth- Sectoral growth in perspective- Inter-state Growth profiles- Economic development and structural Transformation-SDP trends- Planning.

Unit II

Theory of Demographic Transition – Trends in Growth of Population- Sex ratio, Density, Literacy, Birth and Death rate- Urbanisation – Population Policy 2001. Composition of workforce – Unemployment and Poverty.

Unit – III

Agriculture – Cropping Pattern – Irrigation – Agricultural Development in Tamil Nadu- Green Revolution – Agricultural marketing: regulated markets and Co- operative marketing – Non-Farm activities in Tamil Nadu- Food Security and Public distribution system.

Unit IV

Trends in Industrial Development in Tamil Nadu – Factors contributing to Industrial Development in Tamil Nadu- Small Scale Industries: Role , Problems , Promotional Measures for SSI - TIDCO, TANSI, SIPCOT, DIC – Economic Liberalisation Vis-a - Vis Industrial Growth.

Unit – V

Transport and Economic development- Nationalisation of Roadways-performance of public sector transports- Power development in Tamil Nadu-Rural Electrification. Social inputs and its development effects: Health, Education, Nutrition, water supply and environment

References:

1. **TN – An Economic Appraisal – various issues – Department of Evaluation and Applied Research.**
2. **State Planning Commission Reports of Government of Tamil Nadu. spc.tn.gov.in**
3. **Statistical Handbook of Tamil Nadu – Department of Economics and Statistics.**
4. **Leonard A C (2006) , Tamil Nadu Economy, Macmillan India Ltd, New Delhi**
5. **MIDS (1988) , Tamil Nadu Economy : Performance and Issues, Oxford and IBN Publishing Co. Pvt. Ltd., New Delhi**
6. **Naganathan M (2002) Tamil Nadu Economy: Trends and prospects, University Of Madras.**
7. **Dr. V. Lakshmi, Tamil Nadu Economy, Varadhan Socio- Research Centre, Chennai, 2018**

Economic History of India (1757-1964)

Learning Outcome

- **The student would acquire an in depth the various aspects of Economic History, thereby inculcating a sense of History to the study of Economic development in India.**
- **The students learns in detail about the exploitation during the Colonial period and is able to comprehend the early development made by India after Independence.**
- **It provides foundation for the students understanding of Indian Economics during the later and contemporary phase.**
- **This paper also helps to answer many economic based questions in the Competitive Examinations.**

Unit: I

Introduction- Colonial India- Background and Introduction- Overview of colonial economy—Three Stages of Colonialism—Drain of Wealth.

Unit II

Agriculture and Agrarian structure –Permanent Settlement - Ryotwari and Thomas Munro - Mahalwari Settlement — Commercialisation of Agriculture - Rural Indebtedness and State of the Peasants.

Unit III

Railways, Plantations and Mines Railways—Five phases of railways - Tea Plantations—Coal-Mining.

Unit IV

De-industrialization and banking Nature of industrialization— Phases of Industrialization—Industrial Labour, Banking –Evolution and Development

Unit V

India after Independence – Socialistic Vision— Planning Commission - State Controlled Industrialization—Agrarian Reforms

.References:

- 1. AK Bagchi, (1976), Deindustrialization in India in the nineteenth century: Some theoretical implications, Journal of Development Studies.**
- 2. Bipin Chandra, (1981), Nationalism and Colonialism in Modern India (Paperback) Orient Blackswan,**
- 3. Dharma Kumar (ed), (2008), The Cambridge Economic History of India, Vol. II, Cambridge.**
- 4. Irfan Habib, (2006), Indian Economy 1858-1914, A People's History of India, Vol.28, Tulika.**
- 5. Lakshmi Subramanian, (2010), "History of India 1707-1857", Orient Blackswan, (relevant chapters).**
- 6. Tirthankar Roy, (2011), The Economic History of India 1857-1947, Oxford University Press, 3rd edition.**

b. GENDER ECONOMICS

Learning Outcomes

- **Understand the nature and basic concepts of gender, patriarchy, gender equity and equality, gender bias and gender discrimination.**
- **Understand the demographic trends in sex ratio, literacy and health. To gain knowledge on gender development and discrimination indexes and their methods of measurement.**
- **Understand the concepts of women in development process, women and development process and women empowerment.**
- **Understand the concepts of feminisation and poverty, role of SHG and MGNREGA in mitigating feminisation of poverty.**

Unit - I

Concepts of Gender - Gender - Patriarchy - Gender equity - Gender equality - Gender bias and gender discrimination.

Unit - II

Demographic changes and gender - sex ratio - Literacy - health - gender development index and gender discrimination index - concepts and measurement.

Unit - III

Gender and labour market - Gender based division of labour - Debates on household labour.

Unit - IV

Women in Development (WID), Women and Development (WD) - Women and empowerment - National Policy for empowerment of Women.

Unit - V

Feminisation of poverty - causes and measures - Role of SHG and MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act (2005) in reducing feminisation of poverty and unemployment problem.

References:

- 1. GOI (1987 Shram Shakti, report on the Unorganised Sector, New Delhi, 1987.**
- 2. Julie A Nelson (1996) Feminism, Objectivity and economics, Routledge, London.**
- 3. Krishnarar, Maithreyi and Joy P. Deshmukh (1991) Gender in Economics, Ajantha Publishers, New Delhi**
- 4. Loutfi, M F (ed.) (2002) Women, Gender and Work, Rawat Publishers, New Delhi.**
- 5. Special issues of Economic and Political Weekly.**
- 6. Bhasin Kamala, understanding gender: Gender, Basics, New Delhi : Women unlimited 2004.**
- 7. Padmini Swaminathan, Women and Work, Orient Blackswan Private Limited, New Delhi, 2018**

List of Elective Papers
Fifth Semester: Elective Paper -I
a. Agricultural Economics

Learning Outcomes:

- To understand the concept of agricultural economics
i.e. Farming and non-farming sectors, Cropping pattern (diversification (or) rotation)
- To gain knowledge about the land holdings and its impact on productivity.
- To understand about the rural financial issues and sources of finance for agricultural development.
- To understand the concept of agricultural marketing function and types.
- To gain knowledge about the community development programmes.

Unit 1:

Meaning of Agricultural Economics, Need and Importance of Agricultural Economics – Relationship between Agricultural and Non-agricultural Sectors – Major Crops – Food and Commercial Crops, Crop Rotation, Mixed Farming and Sustainable Agriculture – Importance of Technology in Agriculture.

Unit II

Agricultural Holdings, Sub-Division and Fragmentation of Holding in India, Causes and Ill Effects of Sub-Division - Consolidation of Land Holding. Agricultural Productivity – causes for Low Productivity, Suggestions for Raising Agricultural Productivity.

Unit III

Indebtedness-Causes, Consequences, Measures to Remove Rural Indebtedness and Regulation of Money Lenders. Agricultural Credit – Sources of Agricultural Finance – NABARD - RRB- Self Help Group- Non Institutional Finance.

Unit IV

Concepts and Features of Agricultural Marketing in India – Main Defects of Agricultural Marketing. The Regulated Markets – Functions. Co-operative Marketing – Advantages and Progress of Co-operative Marketing.

Unit V

Community Development – Objectives and Implementation of CD, Meanings, Objectives, Strategy - Progress – Swarnajayanthi GramSwarojgarYojana (SGSY) – National Agricultural Policy 2000 - MGNREP – Food Security.

References:

1. Acharya, S.S. and Agarwal, N.L. (2004); **Agricultural marketing in India, Oxford and IBH Publishing Co. Pvt. Ltd.**
2. Badi, R.V. and Badi, N.V. (2004); **Rural Marketing, Himalaya Publishing House.**
3. Giriappa, S. (2000); **Institutions and Agricultural Marketing, Mohit Publications.**
4. Lekhi, R.K. and Singh, Joginder (2005); **Agricultural Economics, Kalyani Publishers.**
5. Mahajan, K.A. (2003); **Co-operative Marketing, Anmol Publications Pvt. Ltd.**
6. Rajan Kumar Sahoo, (2011); **Agricultural Marketing, Dominant Publishers & Distributors Pvt. Ltd**

b. Labour Economics

Learning Outcomes:

- **To understand the basic concepts of labour economics, its characteristics, the demand and supply conditions in labour market in developing economies.**
- **It enables the students to understand the theories of wages determination and why wage differentials exist.**
- **The subject throws the light on labour movements in India and causes for disputes and methods of settlement of disputes.**
- **The subject enlightens the students on need for various social security measures and also national wage policy.**
- **The subject educates the students the problems related to child labour and women workers also various protective provisions towards women and children.**

Unit I

Meaning and Definition of Labour Economics – Scope and nature of Labour Economics– Characteristics of labour market – Nature of labour market in developing countries like India – Demand and Supply of labour.

Unit II

Theories of wage determination – Classical, Neo-Classical, Marginal productivity and Modern Theories – Collective Bargaining and Wage determination – Wage differentials and Wage Regulations.

Unit III

Growth pattern and structure of labour unions in India – Labour movements in India — Industrial relations: Industrial disputes and Industrial peace.

Unit IV

Need for Social security in India– Different schemes of Social security in India – Social insurance and Social Assistance: Minimum wages Act – National Wage Policy.

Unit V

Child labour – Causes of Child labour – Constitutional and legislative provision measures to regulate child labour – Status of Women Workers- Problems of women workers– Protective provision

References:

1. **Bhagoliwal T.N. (2002), Economics of Labour and Industrial Relations, SahityaBhavan Agra.**
2. **C.R. McConnell and S.L.Brue (1986) Contemporary Labour Economics, McGrawHill Publications.**
3. **Datt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi**
4. **Gupta P.K. (2012) Labour Economics, New Delhi Virnda Publication (p) Ltd.**
5. **Hajela P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.**
6. **Kannapon, S. (1983), Employment Problems and Urban Labour Markets in Developing Countries, University of Michigan, Ann Arbor.**
7. **Lester, R.A. (1964) Economics of Labour (2nd Ed.), Macmillan, New York**
8. **Papola T.S. P.P.Ghosh and A.N. Shama (EDS) (1993) Labour employment: Industrial relation in India, B.R. Publishing Corporation**

Sixth Semester: Elective Paper II

a. Industrial Economics

Learning Outcomes:

Students will acquire

- **Knowledge about the significances of industrialization.**
- **Information about the need for balanced regional development in India.**
- **Familiarity about tools and trends of industrial productivity movement in India.**
- **An awareness about promotional measures for industrial productivity growth.**
- **An insight regarding various industrial policies proposed by the Indian Government.**

Unit I

Industrialisation– pattern – rationalization of industrialization – Factors inhibiting industrialisation – Inter dependence of agriculture and industry

Unit II

Location of Industries – Weber’s Theory – Sargent Florence’s Theory – Factors influencing location – Balanced Regional development of Industries – Need for balanced Regional development in India.

Unit III

Industrial Productivity – Tools of Productivity – Factors influencing industrial productivity – Productivity Movement in India – National Productivity Council – Scientific Management.

Unit IV

MSME: Definition, Role, Policy and Promotional Measures. Public Sector Enterprises: Role – Performance of public sector enterprises – Disinvestment Policy

Unit V

Industrial Policy: 1956, 1977 and 1991

References:

- 1. Barthwal. R. R. (1991), Industrial Economics, Wiley Eastern Ltd; New Delhi.**
- 2. Chernnilam. F(2010), Industrial Economics: Indian Perspective, Himalaya Publishing House, Mumbai**
- 3. K.V. Sivayaa and V.B.M.Das (1969) , Indian Industrial Economy , S. Chand & Company, New Delhi**
- 4. Kuchhal, S. C., (1969), Industrial Economy of India, Chaitanya Pub. House,.**
- 5. Sadhu & Singh (1997), Industrial Economics, Himalaya. Publishing House.**
- 6. Sharma. N. K., (2006), Industrial Economics, Anmol Publications Pvt. Ltd.**

b. Managerial Economics

Learning Outcomes:

- **To acquire knowledge of scope, basic concepts and principles of managerial economics.**
- **To acquire insights into demand concept and demand forecasting methods.**
- **To acquire information about cost concepts and break-even analysis.**
- **To acquire knowledge of pricing strategies.**
- **To acquire idea of capital budgeting, project profitability and methods of appraising project profitability.**

Unit I

Definition and Scope of Managerial Economics-Tools of Managerial Decision making: Incremental and Marginal analysis- Equi-marginal principle – Principle of Discounting – Time perspective

Unit II

Types of Demand: Derived Demand and Autonomous demand - New and replacement Demand - Total Demand and market segment demand - Short run and long run demand -Demand forecasting: Purpose and methods of forecasting. Opinion poll methods – Barometric technique – trend projection methods – time series analysis

Unit III

Costs, Concepts: Future cost, Imputed costs, Opportunity cost, Sunk cost– Accounting and Economic costs, Book and Out-of pocket costs – Explicit and Implicit costs, Private and Social costs – shutdown and Abandonment costs. Break even Analysis – Assumptions – Uses –Limitations.

Unit IV

Pricing Strategy : Peak load pricing, Pricing over the life cycle of a product, Skimming price , Penetration price, Multi-product pricing -Cost oriented pricing, Full cost pricing, Marginal cost pricing, Competition oriented pricing, Going rate pricing, Customary pricing –,Cyclical pricing - Porter's five forces model of competitive structure

Unit V

Capital budgeting – cost of capital --Project profitability – Methods of appraising project profitability.

References:

1. **Keat, Paul G and Young, Philip K.Y (2016), Managerial Economics, Pearson Education, New Delhi.**
2. **K. JothiSivagnanam, and R. Srinivasan, (2010), Business Economics, Tata McGraw Hill Education Private Limited, New Delhi.**
3. **Domnick Salvatore, (2009) Managerial Economics in a Global Economy, 4th Edition. Cengage Learning, New Delhi.**
4. **McGuigan, R. James, Moyer, R. Charles and Harris H. Frederick, (2005), Managerial Economics- Applications, Strategy, and Tactics, Cengage Learning, New Delhi.**
5. **Varshney R.L and K.L Maheshwari (2005),Managerial Economics, S.Chand and Co, NewDelhi**

Sixth Semester: Elective Paper III

a. Environmental Economics

Learning Outcomes:

- **To acquire knowledge regarding the relationship between Economy and Environment.**
- **To differentiate different types of pollution say Cumulative and Non-cumulative; Degradable and Non-degradable etc.**
- **To understand the cost and impact of pollution.**
- **To acquire in-depth knowledge in the determination of Optimum level of pollution and measures undertaken by the government to control pollution.**
- **Interlinking the concept of climate change with sustainable development and to understand the impact of climate change in Rural and Urban development.**

Unit I

Environmental Economics an Introduction - The limitations of circular flow model of the economy: the opportunity cost of economic activity -The resource flow between environment and economy-The functions provided by the environment system to economic system

Unit II

Types of Pollutants: Cumulative and Non-cumulative-Local, Regional and Global; Point source and Non-point source-Degradable, non-degradable and persistent pollution

Unit III

Pollution as an external cost-Public goods -Absence of property rights

Unit IV

Concept of optimum pollution-Command and Control-Pollution Tax-Pollution permits-Subsidies- Types of Environment Value-Cost Benefit Analysis -Travel Cost Method

Unit V

Definition of Sustainable Development-Policies for Sustainable Development-Economic Costs of Climate change-Urbanisation – Damages in Rural Environment-Economic consequences of climate change in India

References:

1. **Bhattacharaya: Environmental Economics-OUP,2002**
2. **Hanley, Nick, J.F. Shogren, and Ben White (2013): Introduction to Environmental Economics, London: Oxford University Press. ISBN: 9780199568734**
3. **Karpagam M. (2013) Environmental Economics, Sterling Publishers, New Delhi. ISBN: 9788120721463**

b. Financial Markets and Institutions

Learning Outcomes:

- **To study the functioning of various financial markets and their contribution in economic development.**
- **To acquire more knowledge on Indian Financial Systems.**
- **Able to discriminate Money market and Capital market with respect to their Functions, Instruments and Institutions.**
- **To acquire adequate knowledge regarding Exchange Rate determination, Types, role of RBI in Exchange Rate Management.**
- **An insight into Financial Inclusion and also to study the impact of Micro Finance & SHGs in the economic development of Middle and Low Income Groups.**

Unit I:

Types of Financial markets-Meaning and Definition of Stock market, Derivative market, Commodity and Currency market.

Unit II:

Overview of Indian Financial System –Functions–Players – Structure and growth.

Unit III:

Indian money market –Instruments–Institutions –Functioning of Indian money market Role of RBI in Money Market –Capital market –Types –Instruments – Institutions –Functioning of Indian capital markets: Role of SEBI.

Unit IV:

Exchange rate–Types –Determination of exchange rate. Foreign exchange market –Nature of foreign exchange inflow and outflow –RBI and exchange rate management.

Unit V:

Financial Inclusion–Formal and informal banking– Finance, Microfinance and SHGs.

References:

1. **Bhole, L.M. (2002), Indian Financial Institutions and Markets, Tata McGraw Hill Ltd, New Delhi.**
2. **David S. Kidwell, David W. Blackwell, David A. Whidee, Richard L. Peterson (2005), Financial Institutions, Markets, and Money, 9th Edition, Wiley Publication, New York.**
3. **Khan, M.F. (2006), Indian Financial Institutions, Tata McGraw Hill Ltd, New Delhi.**
4. **Pathak, Bharathi V. (2007), The Indian Financial System: Markets, Institutions and Services, 2/e, Pearson Education India, New Delhi.**
5. **Thummuuri Siddaiah,(2011), Financial Services, Pearson Education India, New Delhi.**
6. **Vasant Desai (1988), The Indian Financial System and Development, Himalaya publishing house, New Delhi**
