

# **SNDT Women's University**

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## **Syllabus – MA Economics**



**SNDT Women's University**

**1, Nathibai Thackersey Road,**

**Mumbai 400 020**

**Revised – 2012-13**



**SNDT Women's University**  
**1, Nathibai Thackersey Road, Mumbai 400020**

Plan Period	Major & Medium Irrigation	Major & Medium Irrigation	Minor Irrigation	Minor Irrigation	CAD	CAD	Total (Mj, Md, Mi and CAD) Expenditure/Investment	Cumulative Expenditure (Investment)	Annual Average Expenditure	Total Plan Expenditure in All Sectors	Ratio of Expenditure on Irrigation Infrastructure to All Sectors Expenditure
I Plan (1951-56)	376.2	85.2	65.6	14.8	-		441.8	441.8	88.4	1960	22.5
II Plan (1956-61)	380	70.2	161.6	29.8	-		541.6	983.4	108.3	4672	11.6
III Plan (1961-66)	576	56.6	441.5	43.4	-		1017.5	2000.9	203.5	8577	11.9
Annual plan (1966-69)	429.8	43.6	556	56.4	-		985.9	2986.7	328.6	6625	14.9
IV Plan (1969-74)	1242.3	51.6	1167.3	48.4	-		2409.6	5396.3	481.9	15779	15.3
V Plan (1974-78)	2516.2	61.5	1426.3	34.9	147.6	3.6	4090.1	9486.4	1022.5	28653	14.3
Annual Plans (1978-80)	2078.6	63.6	976.6	29.9	215.3	6.6	3270.5	12756.9	1635.3	22950	14.3
VI Plan (1980-85)	7368.8	63.9	3416.8	29.6	743.1	6.4	11528.7	24285.6	2305.8	109292	10.5

VII Plan (198 5- 90)	11107 .3	59.2	6192. 9	33.0	144 7.5	7.7	18747.7	43033.2	3749.5	218730	8.6
Ann ual Plan s (199 0- 92)	5458. 8	60.1	3005. 9	33.1	619. 4	6.8	9084.1	99558.9	9084.1	123120	7.4
VIII Plan (199 2- 97)	21669 .2	63.6	10472 .4	30.7	193 7.9	40. 4	34079.5	86196.9	6815.9	485457	7
IX Plan (199 7- 200 2)	49289 .6	78.5	11296 .7	18.0	222 2.8	187 .6	62809.1	149006	12561.8	859200	7.3
X Plan (200 2- 200 7)	83647 .1	80.9	17181 .7	16.6	253 4.8	224 .2	103363.6	252369. 6	20672.7	152563 9	6.8
XI Plan (200 7- 201 2)	17447 3.3	79.3	40665 .1	18.5	492 1.8	2.2	220060.2	472429. 8	44012.0 4	288865 4	7.6

### Eligibility:

1. A student is required to have a background in economics at the undergraduate level for M.A. degree in economics.
2. The eligibility criteria for students who do not have a background in economics at the undergraduate level may be decided by respective Post Graduate departments and Post Graduate Centers.

### Objectives:

The objective of the course is to introduce the students to the advanced theories in Economics. It also equips the students to understand analytical aspects of the subject and enable them to understand the tools of empirical analysis.

### Prerequisites:

1. A student is required to obtain 80 credits for MA degree: 32 credits in core modules and further 48 credits in optional modules (One credit is equivalent to 15 hours of teaching in a semester).
2. Students are required to take two core and three optional papers in I and II semesters and three core and two optional papers in III semester and one core paper, research project and internship in semester IV.

### **SYLLABUS FORMAT**

**Faculty Name: Social Sciences**  
**Course Name: MA – Economics**

Subject codes	Subject Titles	Credit	Internal	TP (E)	P/ V	T
<b>Sem I</b>	<b>Core Group</b>					
106001	Microeconomics - I	4	50	50	--	100
106002	Economics of Growth and Development -I	4	50	50	--	100
<b>Sem II</b>						
206003	Microeconomics – II	4	50	50	--	100
206004	Economics of Growth and Development -II	4	50	50	--	100
<b>Sem III</b>						
306005	Macroeconomics - I	4	50	50	--	100
306006	Indian Economy	4	50	50	--	100
306007	Research Methodology	4	50	50	--	100
<b>Sem IV</b>						
406008	Macroeconomics - II	4	50	50	--	100
406888	Research Project	8	--	--	--	200
406999	Internship	8	--	--	--	200
	<b>Optional Group</b>					
506101	Industrial Economics	4	50	50	--	100
506102	Labour Economics	4	50	50	--	100
506103	Mathematical Economics	4	50	50	--	100
506104	Econometrics	4	50	50	--	100
506105	Demography	4	50	50	--	100

506106	Agricultural Economics	4	50	50	--	100
506107	Economics of Gender and Development	4	50	50	--	100
506108	Financial Institutions and Markets	4	50	50	--	100
506109	Economics of Infrastructure	4	50	50	--	100
506110	Public Economics	4	50	50	--	100
506111	International Economics	4	50	50	--	100
506112	Economy of Maharashtra	4	50	50	--	100
506113	Rural Economics	4	50	50	—	100
506114	Urban Economics	4	50	50	—	100
506115	Economics of Co-Operations	4	50	50	—	100
506116	Economics of Physical Infrastructure	4	50	50	—	100
506117	Economics of Social Infrastructure	4	50	50	—	100
506118	Indian Agriculture	4	50	50	—	100

**L = No. of Lectures / week, P / T = Practical / Tutorial in hrs, D = Duration of Theory paper for Examination in hrs, TP = Theory Paper-marks, Internal = Internal Assessment in marks, P/V = Practical / Viva Voce - marks, T = Total**

## CORE GROUP

### MICROECONOMICS-1

#### PREAMBLE

This paper analyses the economic behavior of individuals, firms and markets. It is mainly concerned with objectives of equipping the students in rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern non-profit maximizing framework. The paper also deals with the welfare economics and general equilibrium in closed and open systems and analysis of economic behaviour under uncertainty

#### MICROECONOMICS – I - 106001

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Introduction and Consumer behavior :</b>  Basic Concepts-Economic Models, Exogenous and endogenous variable, Optimization and equilibrium. Demand curve, Supply curve, Market equilibrium, comparative statics-Market structures. Extension of demand and supply analysis - Elasticity of demand and supply- Income elasticity- concept , methods of measurement-empirical estimation, relationship between individual demand and market demand, application	20	33

	of elasticity of demand. Consumer behavior-The problem of optimization; budget constraints, consumer preference, utility, choice, derivation of law of demand. Revealed preference-The weak and strong ordering- axioms of revealed preference-law of demand-from revealed preference to index numbers. Revision of demand theory by Hicks- Consumer's surplus.		
2.	<b>Production and Costs:</b>  law of variable proportions and returns to scale ;Production function: Cobb-Douglas , CES, VES and Translog functions, Cost of production – concepts - Costs in the short run-long run, cost minimization input choices, isoquants – iso-cost, Least cost combination of inputs ; production with two outputs – economies of scope, learning curve.	15	25
3.	<b>Partial and General Equilibrium:</b> The competitive firm (partial equilibrium); General equilibrium, efficiency in exchange – equity and efficiency, efficiency in production, the gains from trade, market failures – market power, incomplete information, externalities, public goods.	15	25
4.	<b>Welfare economics:</b>  Pareto optimality; criteria for value judgments, social welfare function, Pareto criterion, Kaldor-Hicks criterion, Bergson Criterion, Arrow's Impossibility Theorem.	10	17

#### MICROECONOMICS – II - 206003

Sr. No.	Topic and details	No. of lectures assigned	Weightage in %
1.	<b>Game theoretic approach:</b>  Basic concepts, Zero sum game, pure strategy – pay off matrix – Nash Equilibrium.	8	13
2.	<b>Price output determination:</b>  Price-output determination under different market structures – Monopoly – price discrimination under monopoly – welfare aspects of monopoly – monopolistic competition – short run and long run equilibrium – excess capacity, Chamberlin's approach – Oligopoly – Non-collusive models (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution) Collusive Models (Cartels, Price Leadership).	15	25
3.	<b>Alternative Theories of Firm:</b>  Critical evaluation of marginal analysis; Baumol's Sales revenue maximization model – full cost pricing rule, Bain's limit pricing – Sylos-Labini model.	10	17

4.	<b>Markets for factor input:</b>  Factor pricing with perfect competition and imperfect competition in both the markets; Monopsony power and monopoly power, product exhaustion theorem.	10	16
5.	<b>Market with asymmetric information:</b> Markets for lemons, market signaling, moral hazards, principal agent problem.	7	12
6.	<b>Choice under uncertainty:</b>  Describing risk – expected value, decision making under uncertainty, Neumann-Morgenstern Index, preferences towards risk – reducing risk-diversification-insurance. The demand for risky assets-the trade off between risk and return-mean variance model of asset choice.	10	17

### References:

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**ECONOMICS OF GROWTH AND DEVELOPMENT**

**PREAMBLE**

The study of economic development has gained importance because of sustained interest of the development countries in uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity in consonance with their priorities. While few success stories can be counted, many have grappled with chronic problems of narrow economic base, inefficiency and low standard of living. For this and other reasons, there have been many approaches to economic development. This paper exposes the students to diverse theories, models and views on development.

**ECONOMICS OF GROWTH AND DEVELOPMENT-I – 106002**

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Basic Concepts:</b> Economic growth and development- Measurement of Development-Indices of development – PQLI, HDI, Gender Adjusted HDI - Inter country comparisons of development-Development Gap.	10	17
2	<b>Economic Growth Models-:</b>	10	17



	Neo- classical – Solow and Meade- Joan Robinson’s Growth Model-Hicks-Harrod-; learning by doing approach, Harrod-Domar Model, Technological progress- embodied and disembodied technical progress-Kaldor and Pasinetti- Two sector model – Endogenous growth.		
3	<b>Economic Growth Theories :</b> Theories of growth and development : Circular Causation, Unlimited Supply of Labour, Ranis and Fei model, Big Push, Balanced and Unbalanced Growth, Critical Minimum Effort, Low Level Equilibrium Trap, Dualism	10	16
4	<b>Theories of Development:</b> Classical theory of development- contributions of Adam Smith, Ricardo, Malthus and James Mill, Karl Marx and development of capitalistic economy- theory of social change, surplus value and profit; Schumpeter and capitalistic development, innovation- role of credit, profit and degeneration of capitalism, Structural analysis of development.	20	33
5	<b>Views of Development:</b> Dr. Babasaheb Ambedkar -state socialism, - Mahatma Gandhi- Trusteeship; Amartya Sen- entitlements.	10	17

#### ECONOMICS OF GROWTH AND DEVELOPMENT-II - 206004

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1.	<b>Social ,Institutional and Infrastructure Aspects:</b> Role of Infrastructure in economic development and its importance- Population as limits of growth and as ultimate resource- Population , Poverty and Environment, Human Resource Development (HRD)- Development and Quality of Life- Education, Health, Nutrition Development and Underdevelopment - Perpetuation of Underdevelopment- Poverty, Absolute and Relative.	15	25
2	<b>Sectoral Aspects of Development:</b> Agriculture- Role of agriculture in economic development, Productivity in Agriculture, New technology and sustainable agriculture. Industry- Rationale and pattern of industrialization in developing countries, The choice of techniques and appropriate technology. Labour- Labour markets and their functioning in developing countries.	15	25
3	<b>Trade and Economic Development:</b> International trade as engine of growth- Prebisch, Singer and Myrdal thesis-Free vs. Protective trade- Export-led growth, Dual Gap analysis- Balance of Payments – Protective policies- WTO and developing countries.	10	17
4	<b>Macro Policies and Development:</b> Monetary and fiscal policy- Foreign Direct Investment (FDI) –	10	17

	Multi-National Corporations (MNCs)- IMF and World Bank and Developing Countries.		
5	<b>Planning and Development:</b> Role of planning – Types of planning – Review of Indian Plans.	10	16

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## MACROECONOMICS - 1

### PREAMBLE

Macroeconomics or aggregative economics analyses and establishes the functional relationship between the large aggregates. The aggregate analysis has assumed great significance in recent times. It is necessary to have a prior understanding of macroeconomic theoretical structure for the proper comprehension of different issues and policies. Macroeconomics now is not only a scientific method of analysis, but also a body of empirical economic knowledge. This paper equips the students at the postgraduate level to understand systemic facts and latest theoretical developments for empirical analysis.

### MACROECONOMICS – I - 306005

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Macroeconomic variables:</b>  GDP-GNP-NNP- Potential output-Actual Output-Okun's Law- Price Indices-Real income-Nominal income- Per capita income- Disposable income –Some key identities-National income accounts-Flow of funds accounts	12	20
2	<b>Income Determination:</b>	12	20

	Macro economic equilibrium-Simple Keynesian Model- - IS-LM Analysis-Impact of fiscal and monetary policies-Aggregate supply and Aggregate demand model		
3	<b>Consumption Function and Investment Function:</b>  Absolute income hypothesis-Relative income hypothesis – Permanent income hypothesis -Life Cycle hypothesis- Neo-classical and Keynesian approaches-MEC-Accelerator-Multiplier	12	20
4	<b>Demand for Money:</b>  Cambridge approach-Keynesian approach-Friedman's approach-Tobin's portfolio approach-Tobin and Baumol's approach to transactions demand for money-Patinkin's real balance approach	12	20
5	<b>Supply of money:</b>  Constituents of money supply-High-powered money-Money multiplier-RBI approach to supply of money	12	20

#### MACROECONOMICS – II -306008

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Rate of interest:</b>  Real and nominal rate of interest- Theories of interest rates –Classical- Neo-classical-Lonable Funds and liquidity Preference	12	20
2	<b>Macroeconomics in Open economy:</b>  Balance of payments-Exchange rates regime-Mundell-Fleming model under fixed and flexible exchange rates-Exchange rates overshooting-Purchasing power and interest rate parities	12	20
3	<b>Inflation:</b> Classical, Keynesian and monetarist approaches to inflation-Structuralist approach to inflation-Philips' curve analysis-Short run and long run Philips curve-Natural rate of unemployment-Tobin's modified Philips' curve-Policies to control inflation	12	20
4	<b>Business cycles:</b> Theories of Schumpeter-Kaldor-Samuelson	12	20

	and Hicks-Goodwin's Model-Control of business cycles- Relative efficacy of monetary and fiscal policies		
5	<b>Macroeconomic policy Issues:</b> Lags in the effects of policy, Automatic stabilizers, Targets, Indicators and instruments- Activist Policy- Gradualism versus shock therapy-Rules versus discretion- Role of Credibility- Dynamic Inconsistency Problem – Inflation targeting	12	20

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## INDIAN ECONOMY - 306006

### PREAMBLE

The objective of this Paper at the postgraduate level would be to sharpen the analytical faculty of the student, by highlighting an integrated approach to the functioning aspects of the Indian economy, keeping in view the scope for alternative approaches. Such an analysis is essential because the Indian economy is a unique amalgam of alternative competing and often conflicting theories and a proper understanding of its working is imperative if the student is to comprehend the ramifications that underlie most of the observed phenomena in the Indian economic set-up. The emphasis of the paper is on overall social, Political and economic environment influencing policy decisions. To develop all these themes, the course is divided into specific modules.

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Historical Perspective and Macro-Economic Indicators:</b>  Review of Five Year plans and policies.  National Income– GDP – SDP – NNP - Sectoral Composition – Regional Variations.  Analysis of price behavior – Review of monetary policy in post reform period – reforms in banking sector – SEBI	10	17

2.	<b>Demographic features:</b> Age composition-Sex ratio-Population policy – Literacy – Sectoral pattern of employment	10	16
3.	<b>Agricultural and Industrial Sector:</b> Land holding pattern – Land Reforms – Crop Pattern – Agricultural Labour – Technological change in agriculture – Agricultural cost and prices commission – impact of reforms. Industrial Policy – Private and public sector –Small scale industries – Disinvestment – Industrial growth.	10	17
4.	<b>Public Finance:</b> Trends in revenue and expenditure – Centre-State financial relations – Recommendations of Finance Commissions – Fiscal Sector Reforms	10	17
5.	<b>External Sector:</b> Structure and direction of foreign trade – Foreign Direct Investment – Balance of Payments – Export-Import policy – Trade Reforms.	10	16
6.	<b>Infrastructure:</b> Physical Infrastructure –Transport – Energy – Telecommunication – Public Utilities – Water, Electricity, Gas; Social Infrastructure – Health, Education, Social sectors.	10	17

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## RESEARCH METHODOLOGY – 306007

### PREAMBLE

The objective of this paper is to orient the students in basic research methodology. This paper is a background for the core research component introduced in the syllabus. This paper will enable the students to prepare proposals for the research and conduct research projects. The students will also be equipped in the elementary Quantitative Techniques required in the processing and analysis of the data used in the research.

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Introduction:</b>  Meaning – Objectives – Types – Significance - Research Process – Formulation of Research Problem	10	16
2.	<b>Research Design and Hypothesis:</b>  Meaning of Research Design – Types – Exploratory or formulative – Descriptive – Diagnostic – Experimental  Meaning of Hypothesis- Types – Sources – Characteristics  Basic Concepts – Testing of Hypothesis (in regression analysis)	10	17

3.	<b>Sample Design:</b>  Basic Concepts – Theory – Sampling methods – Probability and non-probability – Sample size	10	16
4.	<b>Sources and Methods of data Collection:</b>  Sources of data – Primary and secondary – Important secondary sources of data for Indian Economy  Primary sources of data – methods of collection of primary data – Observation, Interview, Questionnaire, Schedule, Case study.	10	17
5.	<b>Processing and Analysis of Data:</b>  Processing operations – problems – Statistical tools – Proportion and Percentage – Measures of Central Tendency – Dispersion – Asymmetry – Relationship – Correlation – Regression – Chi Square Test	10	17
6.	<b>Interpretation of data and Report Writing:</b>  Meaning and technique of interpretation – Precaution in interpretation – Significance of Report – Steps in Report Writing – Layout of the report - Presentation	10	17

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## Optional Group

INDUSTRIAL ECONOMICS - 506101

### PREAMBLE

In the contemporary world with globalization and liberalization more and more attention is being given to industry. This course intends to provide knowledge to the students on the basic issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development of India. The objective is to provide a through knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context.

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Industrial Organisation:</b>  Market – Structure – Conduct – Performance – Theories of Product Pricing – Administered prices - Theories of Location – Theories of Growth of firms – Financial Ratios – Methods of Investment Appraisal - Depreciation	10	17
2.	<b>Industrial Policy and Development:</b>  Overview of industrial policy prior to 1991-Industrial policy resolution of 1991 and changes thereafter – Trends and pattern in Industrial Development – Regional Development – Problems Industrial sickness and remedial measures	10	17

3.	<b>Industrial Finance:</b>  Types and Sources of industrial finance, sources and trends of institutional finance (IFCI, SFCs, IDBI, SIDBI) Commercial Banks.	10	16
4.	<b>Private, Public and Small Scale Sectors</b>  Role, Performance and Problems of Private, Public and small scale Sectors – Privatization and Disinvestment.	10	16
5.	<b>External Sector:</b>  Trends and pattern of FDI in India-Trends and pattern of Indian industry abroad-M&A- Export and import component of Indian industrial sector.	10	17
6.	<b>Selected Industries:</b>  Iron and Steel – Cement -Coal - and engineering goods; Cotton textiles- Jute- IT industry.	10	17

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## LABOUR ECONOMICS - 5066102

### Preamble

Issues pertaining to labour markets, employment and unemployment of labour, wages, industrial relations in the globalizing world have become very important for the developing countries. These issues are important for large sections of labour force that is in the organized sector. This paper exposes the students to the theoretical and empirical issues relating to various aspects of labour such as the extent, conditions of work, remuneration and social security

Sr. No.	Topic and details	No. of Lectures Assigned	Weightage in %
1.	<b>Labour Markets:</b>  Features of Labour markets in developed and developing Economies – Demand and Supply of Labour – Role of Migration – Outsourcing - Employment Exchanges	10	17
2.	<b>Employment - Unemployment:</b>  Employment and Development – Measurement of unemployment  Nature, types and magnitude of Unemployment – Measures to promote employment – Labour Market rigidity and flexibility	10	17

3.	<b>Wages:</b>  Wage determination in different markets – organized and unorganized - Concepts – Components of wages - Wage Legislations – Wage Boards - Profit sharing schemes and practices including bonus.	10	16
4.	<b>Industrial Relations, Trade Unions and State:</b>  Industrial Disputes-Meaning-Causes-Trends- – Industrial Disputes Act, 1947 - Collective bargaining – Workers’ participation in management  Trade Unions: Emergence – Growth – Characteristics – Problems – Challenges before the Trade Unions in 21 <sup>st</sup> Century, ILO – decent work and Labour Standards – Labour Flexibility  Role of State in Labour Market under Globalisation – Labour Commissions	10	17
5.	<b>Social security:</b>  Components of Social Security – ESIC Act, 1948 – Adequacy of security system in developing Countries – Improving Social Security	10	16
6.	<b>Special Categories of workers:</b>  Women workers-child labour-agricultural workers-bonded labour  Urban informal sectors - trends-wages-conditions of work-remedial measures	10	17

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### **MATHEMATICAL ECONOMICS: 506103**

#### **PREAMBLE**

This course is designed to equip students to understand the economic concepts and theories which use mathematical tools and techniques to refine the verbal logic. The use of calculus has permitted formulation of economic problems in multivariable mode and yield valuable insight about optimizing human behavior. This course has been designed to include various mathematical techniques/methods/models related to the different parts of economic theory like consumer theory, theory of production, pricing, trade cycles, growth models, etc. The paper covers important aspects of microeconomics; macroeconomics and development theory and the various modules have been accordingly designed.

Sr.	Topic and Details	No. of lectures	Weightage
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No.		assigned	in %
1.	<b>Differentiation and partial differentiation:</b>  Concept and different types of functions, Rules of derivatives for one variable case, logarithmic and exponential functions, interpretation of revenue, cost, demand and supply functions, elasticity and its types with illustrations, maxima and minima for one and several variables, Partial derivatives: Rules of partial derivatives with illustrations, Total differentiation.	12	20
2.	<b>Integral calculus:</b>  Techniques of definite and indefinite integration, consumer's surplus and producer's surplus with illustrations using definite integrals Lorenz curve inequalities and Gini coefficients with illustrations, consumption functions, investment functions, cost functions obtained using integration,	12	20
3.	<b>Matrix Algebra:</b>  Rules for addition, subtraction and multiplication of matrices, types of matrices, Rank of matrix, transpose of a matrix and its properties. Determinants: properties, inverse of matrix, Gauss Elimination and co-factor methods for solving linear equations, Cramer's rule and its application.	12	20
4.	<b>Demand analysis and Theory of production:</b>  Ordinal utility maximization, Order conditions, nature of utility functions, ordinary and compensated demand functions, Rate of commodity substitution, equation of budget line, Optimal quantity combination using utility index and budget constraint extended from 2 goods to 'n' number of goods.  Production functions, homogeneous and non-homogeneous, properties of Cobb-Douglas production function, Elasticity of substitution, constrained output maximization and cost minimization, Euler's theorem.	12	20
5.	<b>Market equilibrium:</b>  Price determination of the firm and industry in short run, shut down point with illustrations, competitive equilibrium under taxation, Equilibrium under simple monopoly, monopoly equilibrium after lump sum tax and specific taxes levied, Equilibrium under price discrimination with illustrations.  Duopoly Solutions under Cournot model and cartels, Solution under market sharing model.	12	20

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### ECONOMETRICS: 506104

#### PREAMBLE

The objective of this paper is to equip the students with basic theory of econometrics and relevant applications of the methods. The topics covered in the course include various problems faced in estimation of both single equations and simultaneous equations models. The course also covers various econometric methods applicable to different topics in economics and those needed for applied economic research. An introductory module on multivariate methods has also been included in the course which constitutes an important tool for analysis in multivariable data in development related studies.

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Two variable Linear Regression model:</b>  Concepts of population and Sample Regression functions, Assumptions of the method of least squares, OLS estimators of regression coefficients, properties, mean and variance of coefficients and the random term, Properties of BLUE and Gauss-Markov theorem, coefficient of determination.	12	20
2.	<b>Classical Linear Regression model:</b>  The probability distribution of stochastic term $U_i$ , its normality distribution, concepts of homoscedasticity, heteroscedasticity, autocorrelation and multicollinearity, Interval estimation and confidence	12	20

	interval for the least square estimators, testing the regression coefficients using t-test and Z-test.		
<b>3.</b>	<b>Linear Programming and Transportation Problems:</b>  Formulation of LPP of Minimization and maximization types, Generalization of LPP, Graphical solution to LPP of Minimization and maximization with and without mixed constraints, Simplex method for solving of maximization problems, Duality in LPP, symmetry between primal and dual with mixed constraints, Transportation problem: Statement of the problem, solution of transportation problem by North-West corner rule, least cost method, VAM method.	<b>12</b>	<b>20</b>
<b>4.</b>	<b>Input-out analysis:</b>  Open and closed input-output analyses, technology coefficient matrix for 'n' sectors and determination of equilibrium level of output by the inter-consistency model, Illustrative problems for two and three sector models.	<b>12</b>	<b>20</b>
<b>5.</b>	<b>Game theory:</b>  Two person zero-sum game, pure and mixed strategy, game with and without saddle point, Nash equilibrium, constant and non-constant games, solution to games with mixed strategy through graphical solution.	<b>12</b>	<b>20</b>

#### References:

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### DEMOGRAPHY- 506105

#### PREAMBLE

The main objectives of this paper are to gain a clear understanding of demographic concepts, theories, and processes to make students aware of the importance of population in economic development. The

paper also enlightens the student on the quantitative and qualitative aspects and characteristics of the population through various demographic techniques. The issues pertaining to sex ratio, increasing urbanization and components of urbanization like migration and natural increase, changing age structure which are of contemporary importance are also the focus of this paper. The study of this paper is expected to enable the student to understand the population dynamics that leads to the evolution of economic and population policies

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in
1	<b>Introduction and Sources of Population data:</b>  Scope and relevance of Demography- Demographic Analysis and Population Studies- Demography and other disciplines  Demographic data base – Sources of Population data in India - Population Census – Vital Registration – Sample Registration System and Large Scale Demographic Surveys – National Family Health Surveys (NFHS), District level Household Surveys (DLHS) - Quality of Demographic data .	10	18
2.	<b>Population Size and Growth:</b>  Population Size and Trends in the World population-Trends in population in India, states in India  Components of Population Growth- Demographic Balancing Equation –Natural Growth - Net Migration  Population Growth Rate: Ratios and rates- Linear Growth Rate, Geometric Growth Rate, Exponential Growth Rate	05	08
3	<b>Population Processes</b>  Basic Measures of Mortality - Crude Death Rate, Age Specific Death Rate, Standardization of Death Rates, Life Table- Life Expectancy, Special measures- Infant Mortality Rates, Maternal Mortality Rates, Trends in Mortality and Infant mortality and Maternal Mortality Rates in India- factors influencing Mortality  Basic Measures of Fertility – Period and Cohort Measures – Child Woman Ratio, Crude Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rates- Cohort Rates – Trends in Fertility in India- Bongaart’s models of fertility-socio economic determinants of fertility  Nuptiality Analysis –Mean Age at Marriage, Singulate Mean Age at Marriage – Indian Experience  Migration- Types of Migration, Measures of Migration-Trends of Migration  Theories of migration  Demographic transition- India’s experience	15	25

4.	<p><b>Composition and characteristics of population</b></p> <p>Population Composition by age and sex- mean age, median age, dependency ratio, child dependency ratio, old age dependency ratio, population ageing</p> <p>Age pyramids- determinants of age structure,</p> <p>Age pyramids in India- demographic dividend- demographic social and economic implications of changing age structure</p> <p>Population Ageing and its socio-economic consequences</p> <p>Sex structure- sex ratio- sex ratio of child population - factors determining sex ratio</p> <p>Sex ratio imbalance in India and future scenario- Factors responsible for declining sex ratio in India</p> <p>Characteristics of population</p> <p>Religion, marital status, education, economic status- employments and occupation</p>	13	22
5	<p><b>Population Distribution and Urbanization:</b></p> <p>Geographic Distribution of the World Population – Urbanization – Growth and distribution of rural and urban population in developed and developing countries, level of urbanization and rate of urbanization – Urbanization in India, components of urban growth - deterrents and consequences of urbanization.</p>	05	07
6	<p><b>Population and Development</b></p> <p>Theories of population: Malthusian theory, Marx’s views on population, Boserup’s thesis</p> <p>Contemporary debates on population, environment and development-population and sustainable development</p> <p>Gender issues in the population, environment, development</p> <p>Demographic dimension of well being</p>	08	13
7.	<p><b>Population Policy and programmes in India</b></p> <p>Evolution of Population Policies in India – The shift in population control to family welfare, to women empowerment:</p> <p>Role of ICPD</p> <p>Evolution of population programmes-Family planning programmes, Reproductive Health Programme, National Rural Health Programme</p> <p>Family Planning Strategies and their outcomes : Reproductive Health, maternal nutrition and child health policies, population and strategies for human development of different social groups: Social impact of new reproductive technologies and their regulation –The</p>	04	07

	New Population Policy, Tasks before the National Population Commission.		
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AGRICULTURAL ECONOMICS - 506106

PREAMBLE

The objective of this course is to provide a detailed treatment of issues in agricultural economics to those intending to specialize in this area; its objective is to familiarize students with policy issues that are relevant to Indian agricultural economics and enable them to analyze the issues, using basic micro-economic concepts.

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
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1	<b>Agriculture and Economic Development:</b> Nature and Scope of agriculture economics, Role of agriculture in economic development, Interdependences between agriculture and Industry, Models of interaction between agriculture and rest of the economy.	15	25
2	<b>Agriculture Production and productivity:</b> Economics of agriculture production, Production function analysis in agriculture, Size of farms and productivity, Size of the farm and profitability, Farm budgeting and cost concepts, ; Land reform measure and performance; Women and land reforms, Problems of marginal and small farmers.	15	25
3	<b>Agriculture Finance and agriculture prices</b> Characteristics and sources of agricultural credit- Institutional and non institutional, Reorganization of agriculture credit- Co-operative, Regional rural banks, and NABARD. Behavior of agricultural prices- Cobweb Model, Term of trade between agriculture and non agriculture. Agricultural price policy-\ and evaluation.	15	25
4	<b>Agricultural Growth and External sector</b> Agricultural development in India under the plans,Recent trends in agricultural growth in India, Inter regional variations in growth of output and productivity; Cropping pattern shifts, Role of public investment and capital formation in Indian agriculture; Strategy of agricultural development. New economic policy and Indian agriculture. Role of MNCs, Globalization of Indian economy and problems and prospects of Indian agriculture. WTO and Indian agriculture	15	25

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## ECONOMICS OF GENDER AND DEVELOPMENT - 506107

### PREAMBLE

This course would provide students an understanding of the nature of the economic role of women and their contribution to the national economy on the basis of a scientific and non-sexist analysis. The modules incorporated in this course provide an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.

Sr. No.	Topic and Details	No. of lectures assigned	Weightage in %
1.	<b>Introduction to Gender Studies:</b> Importance of Women's Studies Concepts- 'Sex' Versus 'Gender', Oppression and Exploitation, Socialisation, Social Construction, Deconstruction, Patriarchy, Trends in Feminism, Gender Based Division of labour Economic Basis and Functioning of Patriarchy and Matrilineal societies, structures and systems Gender and the Process of Economic Development: Feminist Criticism of Development Indices and WID-WAD-GAD, Human Development Approach, Gender and Development Indices- Mainstreaming Gender into Development Policies, Gender Planning Techniques and Gender Sensitive Governance, Paradigm Shifts from 'Women's Wellbeing' to 'Women's Empowerment'- Addressing Practical Gender Needs and Strategic Gender Needs of Women	10	17
2.	<b>Women: Demographic Aspects:</b> Age structure, Mortality rates and Sex ratio. Causes of Declining Sex Ratios and Fertility Rates in LDCs with	10	17



	Special Reference to India Theories and Measurement of Fertility and Its Control. Gender and Population Control Policy with Special Reference to India. Reproductive Rights Women, Health and Nutrition Women and Education Economic Status of Women- Work Participation Rate of women		
3.	<b>Women in Decision Making:</b> Factors Affecting Decision-making by Women Role of Voluntary Organizations, Self-help Groups-Women's Leadership in Micro Finance Review of Legislation for Women's Entitlements, Protection of Property Rights and Social Security. Schemes for Safety-net for Women. Social Structure and Social Security of Women - Entitlements, Access to Control over Economic Resources, Ensuring Economic Independence and Risk Coverage. Power of Decision-Making at Household Levels, Class and Community Levels- Role of Kinship in Allocation of Domestic and Social Resources Economic Status of women and its Effect on work Participation Rate, Income Level, Health and Education in Developing Countries and India. Democratic decentralization and Women's Empowerment in India	10	17
4.	<b>Conceptualization of Women's Work:</b> Concept and Analysis of Women's Work-Paid and Unpaid Work-Valuation of Productive and Unproductive Work Visible and Invisible Works: Visibility of Women in Statistics and Indicators-Economically Productive and Socially Productive Work Economic Status, Private Property and Participation of Women in Pre-industrial and Industrial societies, Women's Contribution to National Income. Women and Labour Markets- Factors Affecting Women's Entry in Labour Market-Supply and Demand of Women's Labour in the Developed and Developing Countries Work participation of women in agriculture and non-agricultural activities (with reference to India) - Work Efficiency and Women Women in the Informal Sector, Small Scale and Cottage Industries-Women in the Organised and Service Sector Wage Differentials in Female Activities- Determinants of Wage Differentials: Gender, Education, Skill, Productivity, Efficiency, Opportunities. Structures of Wages Across Regions and Economic Sectors	10	16
5.	<b>Women, Technology and Environment</b> Impact of Technological Development and Modernisation on Women's Work Participation Industrial Technologies and Women Agricultural Technologies-Mechanisation, High Yielding Varieties-Green Revolution Horticulture and Floriculture Animal Husbandry, Dairy Development Poultry Development	10	17

	Women in Sericulture Women in the Fisheries Female Activities and Ecological and Environmental Concerns-The Two Way Relationships Role of New Technologies for Helping women Provision of Information and training for Simple Harvesting of Economic Services		
6.	<b>Social Security and Social Protection for Women</b> Social Security of Women Entitlements, Ensuring Economic Independence and Risk Coverage Access to Credit and Insurance Markets Role of Voluntary Organisations and SHGs in Providing Social Security. Labour Market Biases and Gender Discrimination Effectiveness of Collective Bargaining Review of Legislations for women's Entitlements Protection of Property Rights and Social Security Schemes for Safety Net for Women Need for Women Workers' Union Affirmative Action for women and Improvement in Their Economic and Social Status	10	16

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### FINANCIAL INSTITUTIONS AND MARKETS - 506108

#### PREAMBLE

The positive and significant role of financial institutions in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction. It is, therefore, essential that the student of economics should be well conversant with the theory and practice of different financial institutions and markets to understand and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

#### FINANCIAL INSTITUTION AND MARKETS

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Nature and Role of Financial System :</b> Money and finance – Money and near-money – Financial intermediation and financial intermediaries – The structure of the financial system – Functions of the financial sector – Role of financial system in economic development, Indicators of financial development – Criteria to evaluate assets; Risk and financial assets, types of risk – Valuation of Securities, Financial development Ratios ;( Finance ratio, Financial Inter-relation Ratio, Intermediation Ratio).	15	25

2	<b>Financial institutions</b> Financial institutions- Banks- Central and commercial banks, non-bank financial institutions-financial intermediaries and non-intermediaries- Development banks – role and functions Regulatory role of central bank- Function of Central Bank – The aims and objectives of the monetary policy in developed and developing countries – Instruments of monetary policy-relationship between monetary policy and financial markets Productivity and efficiency of banking system-Financial sector reforms in India	15	25
3	<b>Financial Markets:</b> Role and Structure of money market and capital market – Call money market, Treasury bill market, Commercial bill market including commercial paper and certificate of deposits, Discount market – Government securities market – Markets for derivatives : futures and options, and other derivatives: types, uses and pricing of derivatives, SEBI : its impact on the working of capital market in India.	15	25
4	<b>International Financial Markets:</b> Nature, organization and participants – Exchange rates – devaluation, and depreciation – Risk hedging and futures in exchange rates –Lending operation of World bank and its affiliates – Working of IDA and IFC. Asian Development bank and its lending activities; Asian Development Bank and India. Euro-dollar and Euro-Currency markets: their developmental role and regulation at the International level.	15	25

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## PREAMBLE

The important role infrastructure plays in a country's development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. Of the various categories of infrastructure, the category of social overhead capital has gained particular prominence. The contents of the paper 'Economics of Infrastructure' exposes the student wholly to issues involved in development of infrastructure in developing countries like India.

Sr. No	Topic and Details	Number of Lectures assigned	Weightage in %
1.	<b>Introduction:</b> Infrastructure and Economic Development- Infrastructure as a public good: Physical and Social Infrastructure: Rationale of State intervention- Special characteristics of public utilities- Approaches to social infrastructure- Human resource development and human development.	12	20
2.	<b>Transport and Communication:</b> Characteristics of demand and supply-The structure of Transport Costs. Demand for Transport. Principle of Pricing. Special Problems of Individuals Modes of Transport; Characteristics and problems of f Postal Services- Criteria for Fixation of Postal Rates – Telecommunication- Rate-making in Telephone Utilities.	12	20
3.	<b>Energy, Electricity, Gas, and Water supply:</b> Energy and Economic Development, Energy Conservation, Renewable and Non-conventional Sources of Energy. Bulk Supply and pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plants. The Case for a National Power Grid. Financing Water Utilities. Urban and Rural Water Supply-The concept of user charge, The Exploitation of Natural Gas. Pricing Problems.	12	20
4.	<b>Economics of Education:</b> Special characteristics of education, Education and Economic Growth. Approaches to Educational Planning, Social Demand, Rate of Return – Private and social rates of return and Manpower Balance Approaches. The Case for Universal, Free, Primary Education; Structure of higher education and problems of its financing in India; Human Resources and Human Capital Development. The issues in education policy	12	20
5.	<b>Economics of Health:</b> Special characteristics of health, Health dimensions of development; Determinants of Health – Poverty, malnutrition, illiteracy and lack of information; Economic dimensions of health care – Demand and supply of health care ; Financing of health care and resource constraints; Disease burden and its measurement- Planning of health care in India, Inequalities in health – class and gender perspectives; Institutional issues in health care delivery.	12	20

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**PUBLIC ECONOMICS - 506110**

**PREAMBLE**

Role and functions of the Government in an economy have been changing with the passage of time. The term ‘Public Finance’ has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures while budgetary policy is an important part to understand the basic problems of use of resources, distribution of income, etc. There are vast array of fiscal institutions – tax systems, expenditure programmes, budgetary procedures, stabilization instruments, debt issues, levels of government, etc., which raise a spectrum of issues arising from the operation of these institutions. Further, the existence of externalities, concern for adjustment in the distribution of income and wealth, etc. require political processes for their solution in a manner which combines individual freedom and justice. This paper combines a thorough understanding of fiscal institutions with a careful analysis of the issues which underline budgetary policies in general and Indian experience in particular.

**PUBLIC ECONOMICS –I**

Serial No.	Topic and details	No. of lectures Assigned	Weightage in %
1	Nature and scope of public economics. Role of government in mixed economy, private, merit and public goods, structure and growth of public expenditure, reforms in expenditure, public goods and market failure	12	20
2	Theory of incidence and its types, division of incidence of tax in proportion to elasticity of demand and supply, Benefit principle and ability to pay approaches to taxation, meaning of optimal	12	20

	taxation, excess burden of indirect taxes over direct tax.		
3	Public debt: meaning, sources of public debt, effects of public debt, burden of debt, principles of debt repayment and management. Objectives of fiscal policy: full-employment, anti-inflation and economic growth, redistribution of income and wealth, Compensatory finance, measures of resource mobilization and their impact	12	20
4	Public budget: kinds of Public budget, zero-base budgeting, different concepts of budget deficits, trends in revenue and expenditure of government of India	12	20
5	Fiscal federalism in India, vertical and horizontal imbalance, constitutional provisions of transfer of resources through Finance Commission, direct and indirect taxes and non-tax revenues, reforms in direct and indirect taxes, fiscal crisis and fiscal reforms in India.	12	20

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## INTERNATIONAL ECONOMICS - 506111

### PREAMBLE

The objective of this course is to provide a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital – both short term and long-term – at the global level. Besides, preparing the students about the relevance and limitations of these principles, the paper also lays stress on examining the impact of the trade policies followed both at the national and international levels and also their welfare implications at macro level and the distribution of gains from trade with particular reference to India.

Sr. No.	Topic and Details	No. of lectures Assigned	Weightage in %
1.	<b>Theory of International Trade:</b>  The classical theory – absolute and comparative advantage – real cost and opportunity cost approaches, modern theory of international trade – Heckscher-Ohlin theorem – factor endowment and factor price approaches, Theorem of factor price equalization, empirical testing of theories of comparative cost and Heckscher-Ohlin model and measurement of gains from trade.	12	20
2.	<b>New Theories of Trade:</b>  The product cycle hypothesis, the vent-for-surplus approach, the Rybezynski theorem, imitation gap theories of trade, increasing returns to scale, intra industry trade, the Neo-Heckscher-Ohlin model, Neo-Chamberlinian models, Neo-Hotelling models, oligopolistic model – Brander-Krugman model, the reciprocal dumping model, empirical work in intra-industry trade - Balassa index and Grubel-Lloyed index.	12	20
3.	<b>Terms of Trade and Interventions:</b>  Concept of terms of trade – their uses and limitations, hypothesis of secular deterioration of terms of trade – its empirical relevance and policy implications for less developed countries. Nominal, effective and optimum rates of tariff, Tariffs and non-tariff barriers, economic effect of tariff under partial equilibrium (price effect, terms of trade effect, competitive effect, income effect, revenue effect), effect of tariff under general equilibrium, Stolper-Samuelson theorem,	12	20
4.	<b>Balance of Payments and Trade Policies in India::</b>  Meaning and components of balance of payments, disequilibrium in balance of payments, adjustment mechanisms – elasticity approach, absorption approach, monetary approach and portfolio balance approach, internal and external balance – Swan model,	12	20

	foreign trade multiplier.  Trade policies in India during last five decades with emphasis on post reform policies, rationale and impact of trade reforms since 1991 on balance of payments, employment and growth; convertibility of rupee.		
5.	<b>The Theory of Regional blocks:</b>  Optimum currency area theories, Forms of economic cooperation - rationale and economic progress of SAARC/SAPTA and ASEAN regions, regionalism (EU, NAFTA), multilateralism and WTO, IMF and World Bank.  Rise and fall of gold standard and Bretton-Woods system, emerging international monetary system, reform of international monetary system.	12	20

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## **ECONOMY OF MAHARASHTRA -506112**

### **PREAMBLE**

The objective of this Paper is to sharpen the analytical faculty of the student, by highlighting an integrated approach to the functioning aspects of the economy of Maharashtra. This paper will enable the students to understand and analyse the economy of the state in the context of the national economy. The emphasis of this paper is on the sectoral components of the economy.

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Introduction</b> Role and significance of economy of Maharashtra in Indian economy. Basic characteristics of the economy of Maharashtra, its significance in the Indian economy. Trends in macroeconomic aggregates- population, state domestic product, revenue and expenditure, fiscal deficit, money supply, deposits, credit, inflation, employment.	15	25

2	<b>Infrastructural development</b> Role of infracture in economic development Physical- Transport and Communication, Water and Irrigation, Energy. Social- Health, education, Social sector indicators- poverty, inequality, human development index, sex ratio and migration.	15	25
3	<b>Agriculture</b> Agriculture production, cropping pattern, marketing and finance, agro-processing and agribusiness- land reforms in Maharashtra. Strategy for agriculture development. Role and Functioning of Co-operative Societies in Maharashtra.	15	25
4	<b>Industry</b> Industrial development in Maharashtra, the role of MIDC, SICOM, MSFC & MSSSIDC in the state industrial development. Foreign Direct investment in Maharashtra. Industrial policy of Maharashtra. industrial strategies in Maharashtra. Social sector- poverty alleviation, housing, health sector, women and child development.	15	25

### Books

- Indian Economy & Problems of Maharashtra: Dr. Burunge & Dr. Chapalgaonkar, Narendra
- Indian Economy: Datta & Sunderam, Himalaya Publishing House (Recent Edition)
- Maharashtra State's Human Development Report
- Census Report Of Maharashtra
- Economic Problems Of Maharashtra: Mukund Mahajan, Mukund Prakashan (In Marathi) (Recent
- Economic survey of Maharashtra- Directorate of Economics & Statistics, Government of
- Economy of Maharashtra: Dr.Kurulkar. Vidhya Prakashan, Nagpur (In Marathi) (Recent Edition)
- Edition)
- Indian Economy: K.K.Diwait Himalaya Publishing House (Recent Edition)
- Indian Economy: S.K..Mishra & Puri, Himalaya Publishing House (Recent Edition)
- Maharashtra, Mumbai.
- Maharashtra: Santosh Dastane, Dastane Prakashan, Pune (Recent Edition)
- Planning & Budget Documents of the Central Government of India
- Planning & Budget Documents Of The Maharashtra State Government
- Prakashan. (Recent Edition)
- R.B.I.Bulletin & Annual Reports :
- The Central Government of India's Report on the progress of India.

### **RURAL ECONOMICS -506113**

### PREAMBLE

The significance of rural economy in terms of its size, its role in overall economic development necessitates the study of this sector of the economy. The rural economy has undergone changes in terms of size, industrial and occupational composition in response to policy mix adopted during planning period in India. The objective of this course is to make students understand this transformation and the analytics of rural development.

Sr. No.	Topic and Details	No. of Lectures Assigned	Weightage in %
1	<b>Rural Economics</b> Rural Economy of India – size and structure – agricultural sector – non agricultural sector employment - Rural economy in economic development – Intrinsic and instrumental value of rural development	08	15
2	<b>The concepts of rural development :</b> Concept- Rural development, Basic elements of rural development, Theories and approaches for rural development, Gandhian approach, technology centered approach, Marxian approach, Rural development with social justice, rural- urban dichotomy- Determinants of rural development.	14	30
3	<b>Agricultural development in India:</b> Agricultural development as a pre condition for rural development, green revolution, droughts and their impact, community development programme, land reforms, agrarian unrest, farmers movement in India, agricultural based rural development programme, Poverty, unemployment and agricultural development, , dimensions of rural poverty, Various poverty alleviations programmes, Programmes for self employment generation (IRDP) Programmes for wage employment, NREGA, planning for rural development.	14	30
4	<b>Rural industrialization in India:</b> Rural industrialization- typology, location, spread and growth in rural industrialization, Role of the allied agricultural sector in rural development, forestry and logging animal husbandry and dairy, sericulture and other allied activities, Decentralized rural administration, Panchayat Raj System- evolution and experience across states.	14	30
5	<b>Infrastructure and rural development:</b> Role of infrastructure in rural development, issues in rural banking, education and rural development, Irrigation and drinking water, rural electrification, cooperatives in rural development.	10	25

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2. Parthasarathy and Nancharaiah(2004),'Economic reforms and rural development in India', Academic Foundation, New Delhi.
3. Nawar Rohini (1991), ' Rural poverty in India, Indian School of Political Economy, Pune.
4. Dantwala M.L (1991), ' Agricultural Development in India since independence', Oxford and IBM, New Delhi.
5. DandeV.M. and Rath N. (1971, 'Poverty in India', Oxford University Press, Mumbai.

6. Harris John (Ed)(1982), Rural Development: Theories of peasant Economy and agrarian change', Hunching band company.
7. Maheshwari S.R. ( 1985), 'Rural development in India' Sage publications, New Delhi.
8. Jain I.C. (1985), 'Grass without roots', Sage publications, New Delhi.
9. Papola T.S.(1982), ' Rural Industrialization: Approaches and Potential ', Himalaya publication, Mumbai.
10. Government of India.(1978), 'Report of the committee on Panchayat Raj Institutions, Ministry of agriculture and Irrigation, New Delhi.

## URBAN ECONOMICS -506114

### PREAMBLE

Historically inexorable urbanization has been concomitant of economic development. The study of urban economy thus forms important component of the domain of development economics particularly in developing world which has been experiencing 'second wave of urbanization'. The objective of this course is to introduce the students to the analytics of the trends in urbanization, main economic forces that lead to existence of cities, their effect on economic development, urban amenities and congestion, poverty in urban India. The policies to combat the problems like urban poverty and unemployment, environmental degradation will be also are the focus of this course.

Sr. No.	Topic and Details	No. of Lectures Assigned	Weight age in %
1	<b>Urbanization</b> Urbanization: Definition and basic concepts, Process of urbanization, Indicators of urbanization- Level of urbanization- Rate of urbanization- Size of million plus cities. Industrialization- Urbanization nexus. Urbanization- a global view, Urbanization in developed and developing countries. Urbanization in India	10	20
2	<b>Migration and urban growth</b> Components of urban growth- Natural growth, migration, Addition of net new towns, Migration and urban growth, Migration, active and passive migration, Push and Pull factor of migration. Theories of migration-1. Lewis, Fei and Ranis, 2. Revenstein, 3. Everest and 4.Todaro. Contribution of migration in urban growth in India.	15	25
3	<b>Theories of Urban Growth</b> Central place theory, Economic base theory: base ratio and concept of economic base multiplier, Dependency theories, Agglomeration economics, Rank size distribution of cities.	15	25
4	<b>Urban problems and policies</b> Urban employment and poverty_ Urban informal economy- Urban poverty- migration-urbanization- informal work- poverty nexus- urban poverty alleviation policies- Urban infrastructure- Problem of urban housing and transportation, Urban basic services. Environmental problems in urban area, Finances of urban local bodies- policy measures to urban issues. Jawaharlal Nehru National Urban Renewal Mission (JnURM)	20	30

### References:

1. Ramchandran R. (1989), 'Urbanization and urban system in India', Oxford University Press.
2. Bose Ashish ( 1978), 'India's urbanization 1901-2001', Second revised edition, Institute of Economic Growth.
3. Cheruilam Fransis (1984), 'Urbanization in developing countries', Himalaya Publishing House, Bombay.
4. Shukla Vibooti (1988), 'Urban development and regional policy in India : An econometric analysis', Himalaya Publishing House, Mumbai.
5. Sivaramakrishnan K.C., Kundu Amitabh, & Singh B.N., (2010), 'Handbook of urbanization in India', Second edition, Oxford University Press.
6. Susan Loughhead, Onkar Mittal and Geof Wood(2001), 'Urban poverty and vulnerability in India', Department of International Development, Government of United kingdom.([www.ucl.ac.uk/dpu-project](http://www.ucl.ac.uk/dpu-project))
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## **ECONOMICS OF CO-OPRATION-506115**

### **PREAMBLE**

Cooperative institutions have played important role in economic development since the inception of planning in India. In recent years this segment has been transforming in the light of globalization. The main objective of this course is to introduce the students the issues like emergence of various cooperative societies, their role in economic development, their performance, the challenges faced by them in changing economic environment.

<b>Sr. No.</b>	<b>Topic and Details</b>	<b>No. of Lectures Assigned</b>	<b>Weight age in %</b>
1	<b>Introduction of co-operation</b>  Definition of co-operation- Historical perspective of co-operation - World perspective of cooperative movement- Perspective of Indian cooperative movement- Characteristics of co-operative- Principle of co-operatives, Cooperation Vs. Capitalism and Socialism.	12	20
2	<b>Structure of Cooperatives</b>  Structure of cooperative institutions in India- Primary agriculture credit cooperatives, non agriculture credit cooperatives, District Central	12	20



	Cooperative banks, State cooperative banks, Urban Co-operative Banks- Their functions, Progress , Problems and remedies- Role of NABARD in rural credit.		
3	<b>Non credit cooperatives</b> Agricultural marketing societies- Consumer Co-operative Societies- Industrial Co-operative societies- Labour Cooperatives societies- Housing Co-operative societies- their progress problems and remedies.	12	20
4	<b>State and Cooperation</b> Recommendation of Rural Credit Survey Committee, The Registrar, State partnership- Role and function of Cooperative Department, Cooperative Audit, Cooperative legislation- Recommendation of Vaidyanathan Committee.	12	20
5	<b>Co-operation and Planning</b> Professionalization of cooperative management- Development of Co-operative under planning in India- Evaluation- Globalization and Cooperative in India.	12	20

**References:**

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2. Hajela T.N. (2010)'Principles, problems and practice of Cooperation in India', 7<sup>th</sup> edition, Agarwal publication,Agra.
3. Haguh E.M.(1959), 'Cooperative movement in India', Oxford University Press, Bombay.
4. Kulkarni K.R., (1958) 'Theory and practice of Cooperation in India and abroad', Cooperative Book depot, Bombay.
5. Misra Baidhynath,(1997),'Cooperative movement in India', A.P.H. publishing cooperation. New Delhi.
6. Ramkishen Y.(2003), 'Management of co-operatives Histrory, Theory, sectors and Case studies', Jaico Publishing House', Mumbai.
7. Tripathi S.N.(2000) 'Cooperative growth and New Dimensions, Discovery publishing House, New Delhi.
8. Madan G.R.(2007), ' Cooperative movement in India', Mittal Publication.
9. Amit Basak, (2010), 'Co-operative Banks in India Functioning and Reforms', New Century Publications , New Delhi.
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11. NABARD, 'Statistical statement relating to the Co-operative movement in India' . Part I & II.

**ECONOMICS OF PHYSICAL INFRASTRUCTURE-506116**

**PREAMBLE**

The important role infrastructure plays in a country's development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major

obstacle to growth. Of the various categories of infrastructure, the category of social overhead capital has gained particular prominence. The contents of the paper ‘Economics of Physical Infrastructure’ expose the student wholly to issues involved in development of physical infrastructure in developing countries like India.

Sr. No	Topic and Details	Credit	Weightage in %
1.	<b>Introduction:</b> Infrastructure and Economic Development- Infrastructure as a public good: Physical and Social Infrastructure: Rationale of State intervention- Special characteristics of public utilities- Approaches to social infrastructure- Human resource development and human development-Public Private Partnership.	1	25
2.	<b>Transport and Communication:</b> Characteristics of demand and supply-The structure of Transport Costs. Demand for Transport. Principle of Pricing. Special Problems of Individuals Modes of Transport; Internet Connectivity, Telephone-Mobile Connectivity-Characteristics and problems of Postal Services- Criteria for Fixation of Postal Rates – Telecommunication- Rate-making in Telephone Utilities-development of Ports, Railway, Bridges and Highways, Roads.	1	25
3.	<b>Energy, Electricity, Gas,</b> Energy and Economic Development, Energy Conservation, Renewable and Non-conventional Sources of Energy. Bulk Supply and pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plants. The Case for a National Power Grid, The Exploitation of Natural Gas.	1	25
4	<b>Water Supply and Sanitation:</b> Political Economy of Water, Financing Water Utilities. Urban and Rural Water Supply-The concept of user charge, Pricing Problems-State versus market-Commercialisation of water- social audit of water- management of solid waste, waste water management, Industrial waste management-Waste Water Treatment	1	25

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## **Economics of Social Infrastructure-506117**

### **Preamble**

This elective course covers theoretical foundations of economics of health and education and also techniques of economic evaluation will be covered for both the sectors. These two aspects of social infrastructure are clubbed together because there is an interdependence of output and existence of large externalities in both health and education sectors. Also these are important components having critical linkages to human development through improving human capabilities and empowerment. This course aims to equip students with skills to understand and analyze the development of health and education sectors. The emphasis will be on policy options and issues for developing countries like India but will also draw on the experience of other countries wherever relevant.

<b>Sr. No</b>	<b>Topic and Details</b>	<b>Credit</b>	<b>Weightage in %</b>
<b>1</b>	<b>Economics of Health</b> Distinction between health and health care- Nature of health care as an economic commodity- Demand for health and Supply of health- Opportunity costs and problems of rationing health care. Costs and efficiency- Costs: fixed, marginal and average costs. Efficiency - technical and allocative efficiency, and of various types of equity. Market System and health care needs- Market failure and the role of government – how insurance markets work, and how they can fail for health care Health programmes like RCH programme, ICDS scheme, nutrition programmes- their cost and benefits (economic benefits direct and indirect)-.	<b>1</b>	<b>25</b>
<b>2</b>	<b>Financing health care, delivery of health care</b> The economics of financing health care and different approaches taken by governments in different countries-Options for financing health care in developing countries- The rationale of government funding and regulation of health care- examining the potential role of user charges and community financing schemes. Delivery of health care -decentralization and the role of the private/public mix.-health system reforms. The future of Health	<b>1</b>	<b>25</b>

	Sector reforms in developing countries like India.		
<b>3</b>	<b>Economics of Education</b> Formal and non-formal education- Special characteristics of education- Implications for economic analysis- Role of the state – Education, Productivity and Employment-Investment in education: Costs and benefits, Private and social rates of return (Human capital and Signaling theories of education).	<b>1</b>	<b>25</b>
<b>4</b>	<b>Indian Education System</b> Indian Education system –Rationale of government funding and regulation of education- Alternative method of financing education- Resource allocation to primary, secondary and higher education- Efficiency, equity and distributional aspects: Implications for gender and social groups- Role of private and public sectors, Union and State governments- Special programmes for education.	<b>1</b>	<b>25</b>

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1. Becker, G.S. (1974): Human Capital .2nd.Edn. ,NBER, New York
2. Cecchi, Daniel. (2008): Human Capital, Family Background and Inequality, Cambridge University Press
3. Feldstein, P. J. (1993): Health Care Economics, Wiley (Module1).
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5. Henderson, J.W.(2001): Health Economics and Policy, South-Western, Thomson Learning. Chapters: 2 and 3 (Module 2)
6. Mcpake, B., L. Kumanayake and C. Normand (2002): Health Economics: An International Perspective, Routledge. ( Module1)
7. Musgrove, P. (2004): Health Economics in Development, The World Bank. Chapters: 2,3,4,9 and 10 (Modules 1 and 2)
8. Panchamukhi, P. R. (2002): Economics of Health: An Introductory Review. ICSSR. (Modules 1 and 2)
9. Robinson, E.A.G. and Vaizey, J. (eds) (1966): The Economics of Education, International Economic Association , Macmillan , London ( Modules 3 and 4)
10. Tilak, J.B.G.(1989): Economics of Inequality in Education, Sage, New Delhi.(Module 4)

## INDIAN AGRICULTURE-506118

### PREAMBLE

The objective of this course is to introduce the students to the main issues of Indian agriculture. Agriculture plays a very important role in Indian economy. Agricultural sector is undergoing tremendous changes over the years. The focus of this paper is to enlighten the students on various issues in Indian agriculture. The study of this paper is expected to enable the students to understand and analyse the problems of Indian agriculture and various policy measures.

Sr. No.	Topic and Details	No. of Lectures	Weightage in %
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		Assigned	
1	<b>Role of Agriculture in Indian Economy</b>  Role of agriculture in economic development – Agriculture in Indian economy – Agricultural policy and programmes	06	10
2	<b>Production and Productivity</b>  Cropping pattern in Indian agriculture –Trends in production and productivity – Causes of low agricultural productivity – Remedial Measures – Food security – PDS – TPDS - Other govt. measures	12	20
3	<b>Landholding patterns and tenurial systems</b>  Landholding pattern – Systems of land tenure – Land reforms – Cooperative farming – Contract farming and corporate farming – Agrarian labour – Size and structure - Problems and remedial measures – Feminisation of Agriculture and Land Rights	12	20
4	<b>Agricultural Prices, Marketing and Finance</b>  Agricultural price policy – ACPC – Trends in prices – Terms of trade between agriculture and industry – Nature of agricultural markets – Measures – Sources of agricultural finance – NABARD -	12	20
5	<b>Agricultural Inputs and Subsidies</b>  Agricultural inputs : seeds, irrigation – fertilisers – pesticides – Green revolution – Technological developments	10	17
6	<b>Globalisation and Indian Agriculture</b>  New economic policy and Indian agriculture - WTO and Indian agriculture – Role of MNCs – International Initiatives	08	13

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