

R.M.P.S. STATE UNIVERSITY, ALIGARH



SYLLABUS FOR M.A. ECONOMICS

As per the guidelines of National Education Policy 2020 for The Semester Seventh
to Semester Tenth

Bachelor Degree with Research / M.A. ECONOMICS

Syllabus for Four Semester
Two Year

Raja Mahindra Pratap Singh State University, Aligarh

Syllabus of Post-Graduation (Economics)

Supervising and Advisory Committee for preparing syllabus for Raja Mahindra Pratap State University, Aligarh

S.N.	Name	Designation	Department	College/University
1.	Dr. Dr Munendra Singh Chandwaria (Convenor)	Associate Professor	Dept. of Economics	K .A .College , Kasganj.
2.	Professor Indu Varshney (Member)	Professor	Principal/Economics	Shri Rameshwar Das Agarwal , Girls P G College, Hathras.
3.	Professor Md Mahmood Alam (Member)	Professor	Dept. of Economics	D. S College , Aligarh.
4.	Prof. Sheo Kumar Singh , Shri Varshney College , Aligarh. (Member)	Professor	Dept. of Economics	Shri Varshney College , Aligarh
5.	Dr. Neeraj Kumar Mishra (Member)	Associate Professor	Dept. of Economics	Ganjdundwara College, Kasganj.
6.	Dr Krishna Bajpai (Member)	Associate Professor	Dept. of Economics	Shri Tika Ram Girls College, Aligarh.
7.	Prof Umme Kulsoom (Member)	Professor	Dept. of Economics	Shri Tika Ram Girls College, Aligarh.
8.	Prof M K Singh (Expert)	Professor	Dept. of Economics	MJPRU, Bareilly.
9.	Prof Dinesh Kumar (Expert)	Professor	Dept. of Economics	CCSU, Meerut.

Semester wise titles of the papers in 4th and 5th Year Bachelor Degree with Research and M. A. Economics.

Year	Semester	Course Code	Paper Title	Theory/Practical	Credits
			SEMESTER VII – COMPULSORY PAPERS	Theory	5/4
4	VII	A080701T	P1- Indian Economy. Major/ Minor (For Students of other Faculty)		
4	VII	A080702T	P2- Microeconomics-1	Theory	5
4	VII	A080703T	P3-Public Finance -I	Theory	5
4	VII		OPTIONAL PAPER- Any one from the Following Three Papers (Electives)		
		A080704T	P4-Research Methodology	Theory	5
		A080705T	OR P5- Demography		
		A080706T	OR P6-Agricultural Economics		
4	VII	A080707T	P7- Minor (From other Faculty)	Theory	4
4	VII	A080708R	P8-Research Project.	Research Project	4
			SEMESTER VIII- COMPULSORY PAPERS	Theory	5
4	VIII	A080801T	P9-.Microeconomics-II		
4	VIII	A080802T	P10- Public Finance(India)-II	Theory	5
4	VIII	A080803T	P11- Elementary Statistics.	Theory	5

4	VIII	A080804T	OPTIONAL PAPER -Any one paper from the following two papers (Electives) P12-Labour Economics OR P13- History of Economic Thought	Theory	5
		A080805T		Theory	5
				Theory	5
4	VIII	A080806R	P14-Research Project	Research Project	4
5	IX		SEMESTER IX – COMPULSORY PAPERS	Theory	5
		A080901T	P15- Macroeconomics-I		
		A080902T	P16-International Economics-I	Theory	5
5	IX	A080903T	P17-Economics of Growth and Development- I		
5	IX		OPTIONAL PAPER -Any One Paper From the Following 03 Papers (Electives)		
		A080904T	P18- Financial Institution's and Markets.	Theory	5
		A080905T	P19- Mathematical Economics	Theory	5
		A080906T	P20-Environmental Economics	Theory	5
5	IX	A080907R	P21-Research Project	Research Project	4

			SEMESTER X- COMPULSORY PAPERS	Theory	5
5	X	A081001T	P22-Macroeconomics-II		
5	X	A081002T	P23-International Economics-II	Theory	5
5	X	A081003T	P24-Economics of Growth and Development-II	Theory	5
5	X		OPTIONAL PAPERS-Any One From The Following 03 Papers (Electives)	Theory	5
		A081003T	P25- Advance Statistics OR		
		A081004T	P26-Econometrics. OR		
		A081005T	P27-Industrial Economics		
5	X	A081007R	P28-Research Project	Research Project	4

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Seven
Subject: Economics		
Course Code: A080701T	Course Title: P I – Indian Economy	
Credits: 5/4(For Minor of Other Faculty)	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week):		
Unit	Topics	No. of Lectures
I	Indian Economy Understanding the Indian Economy; The Colonial Periods, Post Independence Economy. Structure and Features. Planning For The Economy-Objectives ,Strategy and Achievements. Indicators of Development – National Income, Per Capita Income, HDI and Physical Quality Of Life (PQLI) Index.	18

II	Demographic Features and Resource Base Broad Demographic Features Of Indian Population; Migration. Population Increase- Causes and Remedies .Infrastructure Sectors; Energy , Telecommunications ,I.T, Transport, Ports, Social Infrastructure.	18
III	Unemployment and Poverty Concept, Types , Causes and Estimates; Rural /Urban Migration. Urbanisation and Civic Amenities. Poverty- Concepts and Measurements- Head Count Index, Poverty Gap Index ,Squared Poverty Gap Index and Human Poverty Index(HPI),Effects of Poverty and Unemployment.	18
IV	The Agriculture Sector in India Features of Indian Agriculture-Land Reform, Agricultural Growth And Productivity,Cropping Pattern,Agricultural Marketing, Causes and Measures To Increase Low Productivity, Technological Change and Mechanisation in Agriculture. Green Revolution , Food Security and PDS. Agricultural Finance- Institutional and Non Institutional Finance, Micro Finance,WTO And Indian Agriculture.	18
V	Industrial Sector , Service Sector and Foreign Trade Micro, Small and Medium Enterprises (MSME'S)- Features,Characteristics and Challenges. New Industrial Policy. Industrial Finance, Tourism and Healthcare , Insurance, FDI in Industrial and Service Sector. Indias Foreign Trade- Imports and Exports, Foreign Trade Policy.	18

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)
M.C.Q./assignment/presentation/any other activity related to content.

Suggested Reading:

1. Misra and Puri ; Indian Economy.
2. Dutta and Sundaram: Indian Economy

Program/Class Bachelor Degree with Research and M.A. Economics.	Year: Fourth	Semester: Seven
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Subject: Economics		
Course Code: A080702T	Course Title: P-2, Microeconomics-I	
Credits: 5		Core Compulsory
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week):		
Unit	Topics	No. of Lectures
I	Demand Analysis-Theory of Consumer Behavior: Utility and Indifference Curve Analysis , Price Effects ,Income and Substitution Effects, Slutsky Theorem, Compensated Demand Curve; Revealed Preference Hypothesis of Demand, Elasticities of Demand and Its Measurements , Engle Curve, Consumer Surplus.	15
II	Production Function: Short Run And Long Run . Technical Progress and Production Function, Theories of Production- Law of Variable Proportions and Returns to Scale, Isoquants , Scale Line, Ridge Lines ,Elasticity of Substitution , Equilibrium of the Firm: Choice of Optimal Combination of Factors of Production, Cobb- Douglas and CES Production Function. Theories of Costs- Short Run and Long Run Costs.	18

III	Market Structure- Theory of Firm and its Objectives, Concepts of AR, Mr and TR , Equilibrium of Firm- TR- TC and MR-MC Approach. Perfect Competition- Equilibrium of Firm and Industry, Short Run and Long Run Supply Curve, Kaldor and Saraffa’s Incompatibility of Equilibrium In Perfect Competition.	18
IV	Monopoly- Price and Out Put Determination in Short Run and Long Run, Monopoly Power , Price Discrimination and Dumping , Monopsony and Bilateral Monopoly. Monopolistic Competition- Price and Output Determination in Short Run and Long Run, Selling Costs and Advertising.	17
V	Classical Oligopoly: Non Collusive Oligopoly Models, Cournot, Bertrand and Chamberlains Model, Kinked Demand Curve Model .Collusive Oligopoly: Cartels, Joint Profit Maximisation and Market Sharing Model, Price Leadership; Low cost Price Leader, Dominant firm Price Leader , Barometric price Leadership.	10

**Suggested Comprehensive and continuous Evaluation Method (Total Marks-25 Internal)
M.C.Q./assignment/presentation/any other activity
related to content.**

Suggested Reading:

- 1.H. L Ahuja: Advance Economic Theory.**
- 2. Koutsoyiannis , . Modern Microeconomics.**

<i>Program/Class: Bachelor Degree with Research and M.A. Economics</i>	<i>Year: Fourth</i>	<i>Semester: Seven</i>
Subject: Economics		
Course Code: E080703T	Course Title: P-3 Public Finance-I	
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week):		

Unit	Topics	No. of Lectures
I	Meaning and Scope of Public Finance. Dalton and Musgraves Theory of Maximum Social Advantage, Efficiency in Resource Allocation , Provision Of Public , Private and Merit Goods, Market Failure- Imperfections , Decreasing Cost Externalities.	15
II	Public Expenditure-Concepts and Types , Wagner’s law of Increasing State Activities, Wiseman- Peacock Hypothesis of Public Expenditure , Structure and Growth of Public Expenditure, Budget – Types and Formulation, Deficits- Budgetary, Fiscal and Primary.	15
III	Taxation-Principle of Taxation :Benefit and Ability to Pay Approaches, Buoyancy and Elasticity of Taxation, Direct and Indirect Taxes- Impact , Incidence and Effects of Taxation, Theories of Incidence of Taxation, GST.	15
IV	Public Debt-Sources of Public Debt, Debt Through Created Money, Public Borrowing and Price Level, Burden Of Public Debt, Crowding Out of Public Investment and Activity,, Principles of Debt Management and Repayment	15
V	Fiscal Policy-Objectives, Full Employment , Price Stability, Economic Growth, Redistribution of Income and Wealth, Fiscal Policy and Automatic Stabilisers, Discretionary Fiscal Policy.	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)
M.C.Q./assignment/presentation/any other activity related to content.

Suggested Reading:

- 1. H. L Bhatia: Public Finance.**
- 2. Musgrave and Musgrave: Theory and Practice of Public Finance.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Seven
Subject: Economics		
Course Code: E080704T	Course Title: P4- Research Methodology	
Course Learning Outcomes		
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials (in hours per week)		
Unit	Topics	No. of Lectures
I	Basic Concepts of Research- Meaning , Objectives, Types, Approaches and Significance , Criteria of Good Research , Selection and Defining a Research Problem, Scientific Research Methods. Review of the Related Literature and Selection of a Research problem.	15
II	Research Design – Meaning and Types of Research Design , Important Concepts, Dependent And Independent Variables, Extraneous Variables, , Experimental and Non Experimental . Descriptive Research: Nature, Importance and types and steps. Experimental Research: Nature, importance, steps and type of experimental design. Historical research: Nature, importance, types and steps.	18

III	Design Of Sample Survey And Methods of Data Collection- Meaning and Types of Sample Design, Sample Survey vs Census Survey, Sampling and Non Sampling Errors, Quantitative and Qualitative data, Guidelines for Constructing Questionnaire/ Schedule, Selection of Appropriate Method of Data Collection, Case Study Method.	18
IV	Hypothesis- Concept Sources, Types, Formulating Hypothesis, Characteristics of a Hypothesis. Concept and Technique of Sampling (Probability & Non Probability sampling).	17
V	Types of Measurement Scale (Nominal, Ordinal, Interval and Ratio). Tools of Research (Rating Scale, Attitude Scale, Questionnaire Aptitude test and Achievement test, Inventory). Techniques of Research (Observation, Interview and Project techniques).	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)
M.C.Q./assignment/presentation/any other activity related to content.

Suggested Reading:

1. Aggarwal, Y.P. (1998), The Science of Educational Research: A Source Book, Nirmal ,Kurukshehra · Best, john W. and Kahn James V (1995), Research in Education, prentice Hall, New Delhi ·
2. Burns, R.B. (1991), Introduction to research in education , prentice Hall, New Delhi ·
3. Edward, Allen L (1968), experimental Designs in psychological Research, Holt, Rinehart and Winston, New York ·
4. Good, C.V. and Douglas, E. Scates (1954), methods in Social Research , McGraw Hill, New York ·
5. Kerlinger, F.N. (1973), foundation of Behavioral Research, Holt, Rinehart and Winston, New York ·
6. Koul, Lokesh (1988), Methodology of Educational Research, Vikas, New Delhi
7. McMillan, James H. and Schumarcher, S. (1989), research on Education: A Conceptual Introduction, Harper and Collins, New York ·
8. Mouly, A.J. (1963), the Science of Educational Research, Eurasia, New Delhi
9. Neuman, W.L. (1997), Social Research Methods: Qualitative and Quantitative Approaches, Allyn and Bacon, Boston ·
10. Travers, R.M.W. (1978), An introduction to educational research, Mcmillan, New York ·
11. Van Dalen, D.B.(1962), understanding Educational research , McGraw Hill , new York
12. Young, P.V. (1960), Scientific Social Surveys and research, prentice hall, new Delhi.
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II	<p>Fertility, Mortality , Nuptiality and Migration: Importance of Study of Fertility and its Variuos Measurements: GBR, GFR, TFR, ASFR, SFR, GRR, and NRR. Factors Affecting Fertility- Socio – Economic and Cultural Determinants. Mortality and Its Various Measurements:CDR, ASDR, IMR, SDR, and MMR. Nuptiality Analysis: Concepts and Determinants.</p> <p>Migration and Urbanisation- Concepts and Types, Factors Affecting Migration. Urbanisation -Growth and Distribution of Rural – Urban in Developedand Developing countries.</p>	15
III	<p>Population and Development With Reference To India: Population , Economy and Environment Linkages, Population Health, Nutrition, Productivity Nexus. Major Sources of Demographic Data. Population and Human Development Issues – Cultures, Education, and Fertility.</p>	15
IV	<p>Sources And Methods of Demographic Data: Census , sampling , Vita Registration Methods , NHFS/SRS and DHS. Index of Human Development of Quality of Life. Concepts of Manpower, Relationship Between Population, Education, and Economic Development</p>	15
V	<p>Population Growth and Policy In India: Changing Characteristics of Population in India : Growth Rates, Trend and regional Variations in Sex Ratio, Age Structure of Population, Infant and Child Mortality Rates, Maternal Mortality Rates, Life Expectancy. Population Policy Since independence.</p> <p>Uttar Pradesh – Demographic Structure .</p>	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)

Documentation-10 Marks

Presentation-5 Marks

Question-answers (MCQ) Test-10 marks

Suggested Reading:

1. . Bonar , James : Malthus and his Works .
2. Bogue, D, J: Principles of Demography.
3. Bhende, A.A. and Kanitkar : Principles of Population Studies.
4. Srivastava O. S : Demography and Population.

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Eight
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Subject: Economics		
Course Code: E080804T	Course Title: P6- Agricultural Economics	
Course Learning Outcomes On completion of this course, learners will be able to:		
Credits: 5		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, P-4		
Unit	Topics	No. of Lectures
I	Nature and Scope of Agricultural Economics, Transformation of Traditional Agriculture, Role of Agriculture in Economic Development, Interdependence Between Agriculture and Industry, Models of Interaction Between Agriculture and the Rest of the Economy, Agricultural Development , Poverty and Environment. Agricultural Production and Productivity in India	15
II	Land Tenure and Farming System- Peasant , Capitalist , Collective and State Farming , Tenancy and Crop Sharing Farms , Land Reform Measures and Performance , Problems of Marginal and Small Farmers, Rural Labour supply :,Interlocking of Factor Market ,Mobility of Labour , Agricultural Wages in India, Rural Employment Schemes in India, Organic Farming. Green Revolution.	15

III	Agricultural Markets and Marketing Efficiency- Market Structure and Imperfections , Regulated Markets ,Behaviour of Agricultural Prices , - Cobweb Model , Warehousing ;Prices ;Taxation and Crop Insurance, Food Security and PDS In India.	15
IV	Agricultural Finance- Institutional and Non- Institutional Finance in Agricultural Sector in India, Imperfections in Rural Credit in India, Role of NABARD , Co- Operatives and its Role in Agricultural Development. Role of Subsidies, Technical Progress in Agriculture.	15
V	International Trade in Agricultural Commodities; Commodity Agreements – Role of WTO, Issues in Liberalisation of Domestic and International Trade in Agriculture- Nature and Features of Agri- Business, Role of MNC's , Globalisation of Indian Agriculture.	15

Suggested Comprehensive and Continuous Evaluation Method (Total Marks-25)

Suggested Reading:

1. **Mishra and Puri : Indian Economy .**
2. **Bardhan, P: Land , Labour And Rural Poverty.**
3. **Schultz, T. W: Transforming Traditional Agriculture.**

PAPER -7 MINOR FROM OTHER FACULTY

VII	A080707T	P7- Minor (From other Faculty)	Theory	4
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Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Seven
Subject: Economics		
Course Code: E080706R	Course Title: P-8 Research Project	
<p>Course Learning Outcomes</p> <ul style="list-style-type: none"> ● The students will be able to understand the implications of Research Tools. ● Students will get the experiential learning opportunities in the specific institutions of the society. ● Students will link their knowledge to society. 		
Credits: 4	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No.of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
	Topics	No. of Lectures
	<p>Design a Research Tool or community visit Rural/Slums/Orphanage/Old Age homes and juvenile jail.</p> <ul style="list-style-type: none"> ● Meaning of a research tool ● Characteristics of a research tool. ● General principals of Test construction and standardization. <p>OR</p> <ul style="list-style-type: none"> ● Research report writing: steps and methods. ● Survey method: Meaning and types. 	60

Suggested Evaluation shall be done by Internal as well as External Examiners appointed by the university. (Total Marks-100)

Internal-50

External-50

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Eight
Subject: Economics		
Course Code: E080801T	Course Title: P-9, Microeconomics- II	
Course Learning Outcomes On completion of this course, learners will be able to:		
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, P-4		
Unit	Topics	No. of Lectures
I	Theory Of Distribution-Neo Classical Approach, Marginal Productivity Theory , Determination of Wage In Perfectly and Imperfectly Competitive Markets , Elasticity of Factor Substitution, Technical Progress and Income Distribution, Eulers Product Exhaust Theorem , The Adding- Up Problem ,Clark – Wicksteed-walras Product Exhaustion.	15
II	Determination of Rent – Ricardian Theory of Rent , Quasi Rent. Theories Interest – Classical, Keynesian and Modern Theory of Interest(IS-LM Model). Profits – Concepts and Theories, Monompoly and profits , Schumpeter’s Innovation Theory of Profit.	15
III	General Equilibrium Analysis of Production and Exchange, Exchange and Consumption, General Equilibrium and Perfect Competition, Existence and Uniqueness of Equilibrium. Market Failure – Monopoly as a Cause of Market Failure, External Economies and Dis- Economies	15

IV	Welfare Economics; Individual and Social Welfare. Value Judgements , Concepts of Social Welfare; Pigovian Welfare Economics, Pareto Optimality Criterion and Edgeworth Box ,Conditions of Pareto Optimality.	15
V	New Welfare Economics-Compensation Principle, Kaldor- Hick's Compensation Criteria, Scitovsky Paradox , Social Welfare Function and Social Choice Theory , Bergson's Social Welfare Function, Grand Utility Possibility Frontier Curve, Theory of Second Best.	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)

Documentation-10 Marks

Presentation-5 Marks

Question-answers (MCQ) Test-10 marks

Suggested Reading:

1. H.L Ahuja : Microeconomics .
2. Koutsoyiannis : Modern Micro Economics.

Program/Class: Certificate Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Eight
Subject: Economics		
Course Code: E010802T	Course Title: P- 10 , Public Finance (India)-II	
Course Learning Outcomes On completion of this course, learners will be able to:		
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	

Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Fiscal Federalism in India ; Vertical and Horizontal Imbalance; Assignment of Functions and Sources of Revenue of Local, State and Central Governments, Resource Transfer from Govt .of India, Finance Commissions Recommendations , Centre- State Financial Relations. Share of States in GST .	15
II	Public Expenditure in India -Introduction, Classification and Trends, Items of Expenditure of Centre and State Governments , Recent Trends of Public Expenditure in India. Causes Of Increase of Public Expenditure In India.	15
III	Indian Taxation System -Salient Features - Custom and Excise Duties, Personal Income Tax, Corporate Tax ,State Government; CGST, Stamps and Registration Fees, Land Revenue. Local Governments- Property Tax, House Tax , And water tax, Tax Reforms, Issues in GST.	15
IV	Government Budgeting ; Purpose and Classification , Process of Budget Formulation , Zero Base Budgeting In India , Analysis of Latest Central Budgets . Budget Deficit- Types , Structure and Trends; Fiscal deficits in India.	15
V	India's Public Debt - Trends and Structure , Debt Position Of States, Management Of Public Debt in India , Debt Redemption In India. Deficit Financing In India – Need , Impact and Remedy.	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)

Documentation-10 Marks

Presentation-5 Marks

Question-answers (MCQ) Test-10 marks

Suggested Reading:

1. **B. Mishra : Public Finance.**
2. **Tyagi: Public Finance.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code: A080904T	Course Title: P11- Elementary Statistics	
Course Learning Outcomes .		
Credits: 5	Elective	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Statistics – Meaning and Importance , Statistical Process- Investigations , Collection of Data , Classification and Tabulation , Graphic Representation of Data – Line Graph , Bar Diagram , Pictogram , Pie- Diagram , Histogram , Frequency , Polygon.	15
II	Basic Concepts Of Sampling , - Random and Non- Random Sampling , Simple Random , Stratified and Non Starified Random Sampling ,	15
III	Measures of Central Tendency – Mean , Media and Mode ., Harmonic and Geometric Mean , Merits and demerits of Measurement of Central Tendency . Measures of Dispersion- Range, Quartiles , quartile deviation , Mean deviation ,Standard Deviation , Mean Deviation , Coefficient of Variation , Lorenz Curve.	15

IV	Measures of Skewness – Correlation ; Karl Pearson’s Coefficient Of Correlation , Rank correlation , Simple Linear Regression Analysis , Regression Lines and Regression Coefficients.	15
V	Index Numbers – Preparation of Simple and Weighted index Numbers , Conversin Base , Fisher’s Index Numbers , Indian Statistics – CSO, NSSO , Population Statistics.	15

Comprehensive and Continuous Evaluation Method (Total Marks-25 Internal.)

Suggested Reading : 1. S. P Gupta : Statistical Methods .

- 1. Shukla and Sahai : Advance Statistics.**
- 2. K. L Gupta : Advance Statistics.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Eight
Subject: Economics		
Course Code: E080805T	Course Title: P12 -Labour Economics	
<p>Course Learning Outcomes</p> <p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> ● 		
		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week):		
Unit	Topics	No. of Lectures

I	Nature and Characteristics of the Labour Market In India, Demand For Labour in Relation to Size and pattern of Investment , Supply of Labour In Relation to The Growth of Labour Force , Mobility of Labour Methods of recruitment and Placement, Employment services Organisation in India.	15
II	Poverty and Unemployment in India, Unempolymnt -Conept , Types, and measurement in India, Disguised Unemployment , Impact of rationalization , Technological Change , Modern Employment in Organised Private Industry , Labour Employment in Public , Service and Agricultural Sector.	15
III	Theories of wage Determination- Concept Of Minimum Wage , Subsistence Wage and Fare Wage in Theory and Pracrice , Wage Determination in Various Sectors – Rural , Urban , Organised, Unorganised and formal Sectors , Productivity and Wage relationship, Analysis of Rigidity In Labour Market.	15
IV	Social Security of Agricultural Labour- Concept of Social Security and Evaluation , Social Assistance and Social Insurance , State Policies with respect to Social Security, Problems of Child Labour and Its Problems ,Female Labour ,Glabalisation and Labour Markets.	15
V	Theories of Labour Movement – Growth , Pattern and Structure of Labour Unions in India, Causes Of Industrial Disputes , Role of Judicial Activism , Labour Legislation in India, Current Labou.r Laws	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)
M.C.Q./assignment/presentation/any other activity related to content.

Suggested Reading:

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code: A080807T	Course Title: P-13 History Of Economic Thought	
Course Learning Outcomes		
Credits: 5		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials-Tutorials(in hours per week): L-20, P-4		
Unit	Topics	No. of Lectures
I	Economic Thought of Plato and Aristotle , - Doctrine of just Cost and Just Price – Mercantilism – Main Characteristics, Thomas Mun- Physiocracy , Natural Order , Primacy of Agricultural , Social Classes. Turgot – Economic Ideas of Petty , Locke and Hume.	
II	Classical Economists- Adam Smith , Naturalism and Optimism of Adam Smith ,Public Finance , International Trade , Division Of Labour . T R Malthus -Theory of Over Production, Population Theory , Population Checks . David Ricardo- Doctrine of Rent and Foreign trade Theory.	15
III	Neo – Classical Economists – Alfred Marshall , Distribution of National Income , Elasticity of demand , Representative Firm , Quasi Rent . J S Mill- Theory of Individual Competition , Productive and Unproductive Labour , Socialist Concept	

IV	New Economics – J . M Keynes , Effective Demand , , Theory of Income and Employment , Consumption Function, Theory of Trade Cycle , Concept Of Multiplier and MEC Theory of Investment. Milton Friedman -Permanent Income Hypothesis, Fiscalism vs Monetarism , Joseph Schumpeter-Idea on Profit , Trade Cycle and Capitalism Destruction.	15
V	Indian Economic Thought- Kautilya , Valluvar . Modern Economic Ideas of Naoroji, Ranade , R. C. Dutt and M. N Roy , Economic Ideas of Mahatma Gandhi – Village , Swadeshi , Cottage Cottage Industries , Nehruvian Economics , Economic Ideas of Ambedkar and J K Mehta. A. P. J Abdul Kalam and His Economic Thoughts. Economic Thoughts of Pt .Deendayal Upadhyay.	15

Comprehensive and Continuous Evaluation Method (Total Marks-25 Internal + 75 External)

Suggested Reading:

1.Roll, E : History of Economic Thought .

2. P.N Ghosh and R. Ghosh : Concise History of Economic Thought , Himalaya Publishing House.

3. D.H Taylor : A History of Economic Thought.

• Semester VIII- A08080R P14- Research Project – Core Compulsory.

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code: A080901T	Course Title: P15- Macroeconomics- I	

Course Learning Outcomes

On completion of this course, learners will be able to:

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Credits: 5		Core Compulsory
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	National Income and Accounting Methods -Macroeconomics – Meaning and Subject Matter , Circular Flow of Income in Two, Three and Four Sectors of Economy, GDP and GNP and its Variants , Different forms of National Income accounting , - Social Accounting , Input – Out Put Accounting , BOP Accounting.	15
II	Consumption Function - Consumption Analysis, Short – Run and Long Run Consumption Function, Linear and Non – Linear Consumption Function, Keynesian Psychological Law of Consumption Income – Consumption Relation , Absolut income , Relative Income , Life Cycle And Permanent Income Hypothesis.	15
III	Investment Function -Marginal efficiency of Investment and level of Investment , The Multiplier and Accelerator Theories , Neo- Classical theories of Investment, Flexible Accelerator,Impact Of Inflation , Influence of Policy Measures on Investment.	15
IV	Classical And Keynesian Approach – The Basic Classical Models , Say’s Law of Market , Interest Rate- Wage and Price flexibility, Role of QTM, Labour market and its Equilibrium ; Basic Keynesian Model -balanced Budget Multiplier, Aggregate Demand- Aggregate Supply and Saving and Investment Approach.	15

V	Neo- Classical and Keynesian Synthesis- Neo- Classical and Keynesian Views on Interest , The IS-LM Model , Extension of IS_LM Model with Government Sector , Relative Effectiveness of Monetary and Fiscal Policies, Extension of IS-LM Models with Labour Market and Flexible Prices.	15
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Suggested Comprehensive and Continuous Evaluation Method (Total Marks-25 Internal + 75 Exam)

Suggested Reading:

1. **H. L Ahuja : Macroeconomics .**
2. **Branson : Macroeconomics .**
3. **M. L Seth: Macroeconomics .**
4. **S. B Gupta ; Monetary Economics.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code A081002T	Course Title: P16-International Economics-I	
Course Learning Outcomes		
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Tutorials (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	International and Inter- Regional Trade , Meaning , Advantages and Disadvantages and Effects ,Basis of International Trade , Trade as Engine of Growth.	08

II	Theories of International Trade- Absolute Cost and Comparative Cost Advantage, Opportunities Cost of Haberler And Comparative Advantage , Reciprocal Demand Theories ,	10
III	Factor Endowments and The Heckcher- Ohlin Theory ; Factor Price Equalisation Theorem , Stolper Samuelson and Rybczynski Theorem , Leontief Paradox , Taussigs Modifications , Theory of Overlapping Demand , Technological Gaps , Product Cycle Models .	15
IV	Terms of Trade- Meanings and Types , Uses and Limitations , Measurement of Gains from Trade and Their Distribution , Hypothesis of Secular Deterioration of Terms of Trade , Offer Curve and its Concepts.	15
V	Meaning and Components of Balance of Payments , Balance Of Trade , Equilibrium and Dis -Equilibrium in The BOP , The Process of Adjustment and Systems of Gold Standard , The Elasticity Approach , International Capital Movements , FDI and Port Folio Investment.	15

Comprehensive and continuous Evaluation Method (Total Marks-25).

Suggested Reading:

1. H. G , Mannur : International Economics.
2. Sodersten , B. O : International Economics .
- 3.

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code: A080903T	Course Title: P17- Economics of Growth and Development-I	
Course Learning Outcomes		

Credits: 5		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Economic Growth and Development – Factors Affecting Economic Growth , Capital , Labour , and Technology ; Growth Models – Harrod – Domar , Instability and Equilibrium , Neo- Classica Growth Models – Solow and Meade , Mrs Joan Robinson ‘s Growth Model ,	15
II	Concept Of Golden Age and Golden Rule of Accumulation , Absolute and Conditional Convergence , Technological Progress- Embodied and Dis- Embodied Tecchnical Progress, Growth Accounting ; Neo – Keynesian Models of Growth , - N- Kaldor , L. Pasinetti ; Two Sector _Models of Growth , Models of Endogenous Growth – AK Model , Romers Model , Mahalanobis Model.	15
III	Growth and Development : Relationship between Growth and Income Distribution , Income Distribution in Developing Countries , Concept and Measurement of Poverty , Functional Impact of Poverty , Project Appraisal; Social -Cost Benefit Analysis , Shadow Prices , Social Rate of Discount , Project Criterion , Little Mirrlees and UNIDO Approaches- A Comparison	15
IV	Development and Underdevelopment – Perpetuation of Underdevelopment , Poverty – Absolute and Relative, Measuring Development and Development Gap , Per Capita Income , Inequality of Income , HDI and Other Indices of Development and Quality of Life – Food Security , Education , Health and Nutrition, Population Problem Development .	15
V	Introduction of Infinite Horizon Model , Basics of Over Lapping – Generation (Diamond) Model , Input – Out Put Analysis. Role of Education , Research and Knowledge.	15

Suggested Comprehensive and Continuous Evaluation Method (Total Marks-25)

- Suggested Reading:**
1. Mishra and Puri ; Development and Planning.
 2. Todaro; Growth and Development.
 3. A. P. Thirlwal : Growth and Development.

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fourth	Semester: Ninth
Subject: Economics		
Course Code: A080905T	Course Title- P18- Financial institutions and Markets	
Course Learning Outcomes		
Credits: 5	Elective	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Structure Of Financial Systems ; Functions of financial Sector ,Financial System and Economic Development , Financial Intermediation and Financial Intermediaries , Indicators of Financial Development , Regulatory Financial Institutions , RBI- Role and Functions , SEBI- Objectives , Functions and its Performance in The Working of Capital Markets India .	15
II	NBFI's – Definition, Types , Growth and Their Impact on India's Economic Development ; Small savings – Growth and Composition; Provident Funds , Pension Funds , Hire Purchase Finances ,Lease Financing , Merchant Banking , Venture Capital Funds	15
III	UTI and Mutual Funds – Organisation and Schemes ; Insurance Companies – Types and Structure; Insurance Regulatory and Development Authority (IRDA)- Objectives, Functions and Performance , Credit Rating Agencies in India – Objectives and Functions	15

IV	Time Value of Money ; Future Value , Present Value of an Uneven Series , Valuation of Securities , Concepts of Value , Bond Valuation , Valuation of Equity Shares; Risk and Rate of return :Conceptsand Types of Risk , Measuring Risk ,. Portfolio Theory : Expected Return on a Portfolio, Capital Asset Pricing Model : Financial Ratio Analysis , Liquidity Ratio, Turnover Ratios , Leverage ratios ,and Profitability Ratios.	15
V	Structure and Functions of Financial Markets ; Money Market and its Constituents- Call Money Market , Treasury Bill Market , Commercial Bill Market , Repo Market ,Commercial Paper Market . Capital Market- Government Securities , Corporate securities Markets , Primary and secondary Market for Securities , Discount market , Unregulated Credit Markets Foreign Exchange Market- Nature , Organisation and Participants ; Fixed and Flexible Exchange Rates, Devaluation , and Depreciation , , Markets For Futures – Options and Other Financial Derivatives ; Theories Of Optimum Currency Areas.	20

Evaluation Method (Total Marks-100, Internal Assessment - 25, Main Exam-75

Suggested Reading :

- 1. Bhole , L.M : Financial Institution and Markets .**
- 2. Avadhani V. A : Investment and Securities Markets in India.**
- 3. Avadhani, V. A : Financial Economics , Theory and Practice.**
- 4. Gupta , S. B : Monetary Economics : Institutions , Theory and Policy.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Tenth
Subject: Economics		
Course Code: A080906T	Course Title: P19- Mathematical Economics	
Course Learning Outcomes		
Credits: 5		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials(in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Concept of Function and Types of Functions , Limit , Continuity and Derivatives ,Rules of Differentiation , Interpretation of revenue , Supply Functions , Cardinal and Ordinal Utility; Ordinal Utility Maximisation; Slutsky Equation ,Compensated Demand Functions, Income , Substitution and Price Effects; Concept of Elasticities , Consumer surplus , Theory of Revealed Preference.	15
II	Production Function-Homogeneous Non Homogeneous , Properties of Cobb- Douglas and CEs Production Functions, Simple Derivative of Short Run and Long Run Production Functions ,Modern Approach to Theory of Cost , Cost Functions , Producers Equilibrium – Law of Returns and Returns to Scale , Adding Up Theorem , Technical Progress Through Production Function , Production Possibility Curve ,	15

III	Price Determination in Perfect Competition , Monopoly , Duopoly, Monopolistic and Oligopoly Competition. Price of Factors of Production ;Single Market Equilibrium – Marshallian and Walrasian Equilibrium Conditions , Lagged market Equilibrium.	15
IV	Linear Programming – Primal and Dual problem , Solution By Graphical Method and Simplex Method , Input Out- Put Analysis – Open and Closed Systems ,Hawkins-Simon Conditions , Loentief ‘s Dynamic System. Differential and Difference Equations – First OrderLinear differential Equations – Stability of Market Equilibrium	15
V	Game Theory- some Useful Terminology and Useful Concepts, Strategic Form Games , dominant strategy , purew Strategies , Locating a Saddle Point .Mixed Strategies – arithmetic Method and graphic Method , Nash equilibrium , Pareto Optimality and Competitive Equilibrium- Partial Equilibrium Competitive Analysis – The Fundamental welfare Theorems in Partial Equilibrium Context ;Edgeworh Box, pareto optimality Criteria.	15

Suggested Comprehensive and Continuous Evaluation Method (Total Marks-100- Internal Assessment – 25, Exam - 75)

Suggested Reading

1. Mehta , B. c and GMK Madnani : Mathematics for Economics .
2. Chiang, A.C : Fundamental Methods of Mathematical Economics .
3. Allen , R. G, D : Macro – Economic Theory : a Mathematical Treatment.

Program/Class: Bachelor Degree with Research and M.A. Education	Year: Fourth	Semester: Eight
Subject: Economics		
Course Code: A080806T	Course Title: P20- Environmental Economics	

Course Learning Outcomes		
●		
Credits: 8		Elective
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
Units	Topics	No. of Lectures
I	Environmental Economics -Meaning , Scope and Importance, The Evolution and Growth of Environmental Economics, The Concept of Externalities , , Environment as a public Good and Market Failure, Environmental Kuznets Curve: Theory and some Emperical Evidences , Environmental Valuation; Meaning and Types.	15
II	Ecology and Environmental Interaction, Economic Development and Environment , Bio- Diversity Crisis and Its Conservation . Climate Change and its Impact on Humans and The Economy.	
III	Economics of Natural Resources; A Resource Taxonomy; Managing Exhaustible and Renewable Resources. The Theory of Collective Choices :Hardin's Thesis of The Tragedy Of Commons ; Prisoner's Dilemma Game , Olsen's theory of Collective Action. Natural resources and Environmental Problems,, Natural Resources Policy in India	
IV	Environmental Pollution-Water, Air , Noise , Soil , Thermal , Marine. Environment and Human Health . Environmental Hazard and Disaster Management. Environmental damage and Its Valuation.	

V	<p>Global Environmental Issues-Negative International Externalities and Their Implications.</p> <p>Global Warming and Acid Rains : Causes Effects and Solutions.</p> <p>Major Environmental Organisation and Events : Green Peace Movement , The World Conservation Union ,The Nature Conservancy , Sierra Club , WWF, UNEP , UNCED.</p> <p>The Role of Forests In India's Economy : Deforestation and Degradation of Forests and Their Environmental Consequences.</p> <p>The Vision , Goals , Objectives and Instruments of Environmental Policy; A critique of India's Environmental Policy.</p>	
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Suggested Evaluation Method (75+25=Total Marks-100).

Suggested Readings;

4. **Bhattacharya , R. N : Environmental Economics : An Indian Perspective .**
5. **Dasgupta ,P and Heal , G. M: Economic Theory and Exhaustible Resources**

A080907R- P- 21, Research Project (Core Compulsory)

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Tenth
Subject: Economics		

Course Code E081001T	Course Title- P22 – Macroeconomics II	
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, P4		
Unit	Topics	No. of Lectures
I	Financial Intermediation – A Mechanistic Model of Bank Deposit Determination , Money- Definitions and Functions , Narrow Money , High Mowered Money -and Money Multiplier, Budgets Deficits and Money Supply , Monetary Policy- Control of Money Supply.Measure of Money Supply.RBI ‘s Approach of Money Supply.	15
II	Neo-Classical Approach to Demand For Money – Quantity Theory Approach , Fishers Equation , Cambridge Cash Balance Approach ,Keynes liquidity Preference Theory of Demand For Money, Baumol and Tobin’s Modifications on Demand for Money , Friedman’s Restatement Of QTM , Patinkins Rehabilitation of The QTM.	15
III	Inflation- Meanings and Types; Classical Keynesian and Monetarist Theories of Inflation ; Structuralist Theory of Inflation; Phillips Curve Analysis – Trade Off Between Inflation and Unemployment , Samuelson and Solow- The Natural rate of Unemployment , Rational Expectations of John Muth , Impact Of Inflation, policies to Control Inflation.	15
IV	Trade Cycles – Types and Features; Theories of Keynes , Kaldor ,Schumpeter , Hicks and Samuelson , Goodwins Model ;Control of Business Cycles – Relative Efficacy of Monetary and Fiscal Policies.	15
V	Objectives , Targets and Indicators of Macroeconomic Polices, Gradualism vs Shock Therapy , Rules VS Discretion , Dynamic Inconsistency Problem , Inflatiop targeting , Barro-ricardo and Blinder – Solow Hypothesis.	15

Suggested Comprehensive and Continuous Evaluation Method (Total Mark

Suggested Reading:

1. **H. L Ahuja : Macroeconomics .**
2. **Branson : Macroeconomics .**
3. **M. L Seth: Macroeconomics .**
4. **S. B Gupta ; Monetary Economics.**

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Tenth
Subject: Economics		
Course Code: A081002T	Course Title: P23- International Economics-II	
Course Learning Outcomes On completion of this course, learners will be able to:		
		Core Compulsory
Max. Marks: -75+25		Min. Passing Marks:
Total No. of Lectures-Tutorials- (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	BOP Adjustment Under Fixed and Flexible Exchange Rates-, Elasticity , Absorption , Monetary and portfolio Balance Affroach to BOP Adjustment Mechanism , Role of Expenditure Reducing and Expenditure Switching Policies in Open Economy .	15
II	Tariff's Classification , Measurement and effects of under partial and General Equilibrium, Optimum Tariffs , Retaliation of Tariffs; Quotas – Types and Effects	15

III	Free Trade vs Protections , Dumping , Terms of Trade , Concept , Types , Factor Determining and Importance , Causes of Deterioration In Terms of Trade.	15
IV	World Trade in The 19 th and 20 th Centuries, GATT and trade Rounds , Multilateral Trading Systems and The WTO , - TRIMS, International Trade in Services , UNCTAD, IMF , and World Bank- Functions , Achievements and Failures. Regional Blocks , SAARC, ASEAN and NAFTA .	15
V	Trade Problems and Trade Policies in India during the last seven Decades ;Recent Changes in Composition and Direction of Trade and Their Implications; Trade Reforms Since 1991;Working and Regulations of MNC's in India. Recent Export and Import Policies of Government of India.	15

Suggested Comprehensive and Continuous Evaluation Method (Total Marks-25 Internal+ 75 External)

Suggested Reading:

1. H. G , Mannur : International Economics.
2. Sodersten , B. O : International Economics .

Program/Class: Certificate- Bachelor Degree with Research and MA Economics	Year: Fifth	Semester: Tenth
Subject: Economics		
Course Code: A081003T	Course Title: P24- Economics of Growth and Development- II.	

Course Learning Outcomes		
Credits: 5		Elective
Max. Marks: -		Min. Passing Marks:
Total No. of Lectures-Tutorials (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Classical Theory of Development -Contributions of Adam Smith, Ricardo ,Malthus , and James Mill , Karl Marks and Development of Capitalistic Economy – Theory of Social Change ,Surplus Value and Profit ,Crisis in Capitalism – Schumpeter and Capitalistic Development , Structural Analysis of Development .	15
II	Partial Theories of Growth and Development , -Vicious Circle of Poverty , Circular Causation , Unlimited Supply of Labour , BIG Push , Balanced Growth , Unbalanced Growth , Critical Minimum Effort Thesis , Low Level Equilibrium Trap , Dualism- , Technical , Social , Geographical and Financial , Gunar Myrdals Cumulative Causes Theory ,, Ranis and FEI Model , Rostow and Stages of Growth.	15
III	Role Of Agriculture in Economic Development ; Efficiency and Productivity in Agriculture , New Technology and Sustainable Agriculture , Globalisation and Agricultural Growth ; Rationale and pattern of Industrialisation in Developing Countries The Choice of Techniques and Appropriate Technology and Employment; Terms of Trade Between agriculture and Industry.	15
IV	International Trade as Engine of Growth , Static and Dynamic Gains From Trade ; Prebisch , Singer and Myrdal Thesis vs Free Trade; Export Led Growth ; Dual gap Analysis ;Post GATT International Economic Order.	15
V	Role of Monetary and Fiscal Policies in Developing Countries – Prior Savings , Inflation and Growth , Empirical Evidence ; Empirical Evidence External Resources – FDIvs trade, Technology Inflow ; MNC Activity in Developing Countries ; Borrowings – Domestic and External ; Burden of Borrowing – IMF and World Bank Policies in Developing Countries.	15

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Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)

- Suggested Reading:**
1. Mishra and Puri ; Development and Planning.
 2. Todaro; Growth and Development.
 3. A. P. Thirlwal : Growth and Development.

Program/Class: Certificate - Bachelor Degree with Research and MA Economics	Year: Fifth	Semester: Tenth
Subject: Economics		
Course Code: A081004T	Course Title: P25- Advance Statistics	
Course Learning Outcomes ●		
Credits: 5		Elective
Max. Marks: -		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-5 -4		
Unit	Topics	No. of Lectures

I	Elementary Probability Theory. Addition and Multiplication Theorems , Conditional Probability and Concept of Interdependence , Bay's Theorem , Random Variables , Mathematical Expectation , Probability Distribution : Binomial , Poisson and Normal .	15
II	Theory of Sampling : Types of Sampling , Small and Large Samples, Sampling Distribution: Distribution of Sample Mean , Central Limit Theorem.	15
III	Estimation- Point and Interval Estimates of Mean , Characteristics of Good Estimator , Small and Large Sample Properties , Multiple Regression (Introductory) , Standard Error of an Estimate.	15
IV	Testing Of Hypothesis : Type I and Type II Errors ;Level of Significance ; Interpretation of P Value , Good ness of Fit , Confidence Intervals and Level of Significance , One tail and Two Tail Tests ; Hypothesis Testing of Means and Variance based on t and Z Tests.	15
V	. Association of Attributes , Definition ,Properties and uses of Chi Square Test , Conditions of Applying Chi Square Test. Analysis Of Variance and F Test ,	15

Suggested Comprehensive and continuous Evaluation Method (Total Internal Marks-25, Theory Exam -75)

Suggested Reading: 1. S. P Gupta : Statistical Methods .

2-Shukla and Sahai : Advance Statistics.

3-K. L Gupta : Advance Statistics.

Program/Class: Certificate	Year: Fifth	Semester: Tenth
Subject: Economics		

Course Code: A08105T	Course Title- P26, Econometrics	
Course Learning Outcomes		
•		
Credits: 5		Elective
Max. Marks: -		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, P-4		
Unit	Topics	No. of Lectures
I	Basic Econometrics -Nature , Meaning and Scope of Econometrics ; Simple and Linear Regression Model , - Assumptions , Estimation (Through OLS Approach) , and Properties of OLS Estimators , Gauss – Markov Theorem ; Concepts and Derivation of R ² and Adjusted R ²	15
II	Problems in Regression Analysis – Heteroscedasticity; Nature , Test , Consequences and Remedial Measures . Problems of Multicollinearity and Auto- Correlation- Nature , Tests , Consequences and Remedial Measures. Specification Errors and Errors of Measurement.	15
III	Regression with Qualitative Independent Variables- Dummy Variable Technique- Structural Stability of Regression Models comparing to Regressions , Interaction Effects , Seasonal Analysis , Piecewise Linear Regression , Use of Dummy Variables , Regression With Dummy Dependent Variables; The LPM , Logit , Probit , and Tobit Models.	15
IV	Dynamic Econometric Model- Autoregressive and Distributed Lag Models – Koyack Model , Partial Adjustment Model , Adaptive Expectations , Instrumental Variables; Problems of Expectation , Problems of Auto Correlation , Almon Approach to Distributed Lag Models ; Error Correlation Mechanism, Casualty test and Sim's Test	15

V	<p>Simultaneous Equation Models – Introduction and Examples , The Simultaneous Equation Bias and Inconsistency of OLS Estimators ; The Identification Problem- Order and Rank Conditions ; Methods of Estimation of Simultaneous Equation System ; Recursive Methods and OLS ,; Indirect Least Squares (ILS) , 2SLS , 3SLS and Maximum Likelihood Methods – Applications , Panel data Techniques; Forecasting.</p>	15
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Comprehensive and continuous Evaluation Method (Total Marks- 25 Internal)

Suggested Reading :

- 1.. Koutsoyiannis , A : Theory of Econometrics .
2. Gujrati , D. N – Basic Econometrics .
3. Dongherty , C.: Introduction to Econometrics

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Ninth
Subject: Economics		
Course Code: A080906T	Course Title: P27- Industrial Economics	
Course Learning Outcomes		
Credits: 5	Core Compulsory	
Max. Marks: -75+25	Min. Passing Marks:	

Total No. of Lectures-Tutorials (in hours per week): L-20, T-4		
Unit	Topics	No. of Lectures
I	Scope and Methodology of Industrial Economics Market Structure and Behaviour of a Firm ,Concept and Organization of a Firm – Ownership , Control and Objectives of The Firm , Passive and Active Behaviour of The Firm. Productivity ; Efficiency and Capacity Utilisation, Methods of Measuring Efficiency of a Firm , diversification, Integration and Merger.	15
II	Elasticity of Demand and Business Decision- Making .Demand Forecasting , Pricing Procedures- Theoretical and Pricing in Practice ; Investment Decisions ;Financial Statement and Ratio Analysis, Economics of Patents , Adeption and Diffusion of Innovation.	15
III	Theories of Industrial Location – Weber , and Sargent Florence; Factors Affecting Location. Economies of Scale ; Market Structure and Profitability	08
IV	Industrial Finance- - Sources, Nature , Volume and types of Institutional Finance – IDBI,IFCI, SFCs, SIDC, SIDBI , Commercial Banks ,Capital Structure , Separation of Ownership and Control. Financial Statement- Balance Sheet, Profit and Loss Account , Assessment of Financial Soundness	15
V	Structure of Industrial Labour ; Employment Dimension of Indian industry , Industrial Legislation , Industrial relations – Exit Policy and Social security; Wages and Problems of Bonus – Labour Market Reforms .	15

Suggested Comprehensive and continuous Evaluation Method (Total Marks-25)

Suggested Reading:

1. R. R. Barthwal : Industrial Economics .

3. Mish and Puri : Economics of Development and Planning.

Program/Class: Bachelor Degree with Research and M.A. Economics	Year: Fifth	Semester: Tenth
Subject: Economics		
Course Code: A081006R	Course Title: P- 28, Research Project	
<p>Course Learning Outcomes</p> <p>On completion of this course, learners will be able to:</p> <ul style="list-style-type: none"> ● To understand the process of complete research projects. ● Students will be able to understand the process of research in Economics. ● Students will understand the fundamentals of research process in social sciences. 		
Credits: 8	Core Compulsory	

Max. Marks: -50+50		Min. Passing Marks:
Total No. of Lectures-Tutorials-Practical (in hours per week): L-20, T-4		
	Topics	No. of Lectures
	The student will prepare a Research Project under The Supervision of a Teacher on a relevant Topic in The Field of Economics.	60

Suggested Evaluation Method (Total Marks-100, Project-50,viva-voce-50)

Internal – 50 (25+25)

External – 50(25+25)