

**M.A. Economics**  
**Two Years (Four Semester course)**

**Course Curriculum**  
**Semesters I, II, III & IV**  
**2019-21**

**School of Economics**  
**(A Department under UGC-SAP Programme)**  
**Devi Ahilya Vishwavidyalaya, Indore(M.P.)**

**Course Structure**  
**Choice Based Credit System (CBCS)**  
**Under Ordinance 31**  
**2019-21**

The department has choice based credit system (CBCS) in every course we offer under ordinance 31, in which there are total 106 credits in which 90 actual credits and 16 virtual credits in the complete span of the course of two years. From these 106 credits 48 credits should accrue from 16 Core subjects, 18 credits from Elective Discipline subjects, 6 credits from Elective Generic, 6 credits from soft skill development subjects, 6 credits from Ability Enhancement subjects and 6 credits from project/ field based work. Elective Generic subjects credits can be earned from the subjects offered by the department or by other UTD's. Virtual Credits are 16 which the student has to earn through Comprehensive Viva Voce held after every Semester. Hence 4 virtual credits are given to each Comprehensive Viva Voce. From these 106 credits the credit for each subhead is as under:

<b>S.No</b>	<b>Type of</b>	<b>Code</b>	<b>Number of Subjects</b>	<b>Credit/Subject</b>	<b>Total Credit</b>
1	Core	C	15	3	45
2	Elective Discipline	D	6	3	18
3	Elective Generic	G	2	3	03
4	Soft Skill	S	2	3	06
5	Ability Enhancement	A	2	3	3
6	Comprehensive Viva		1/ Semester	4	16
7	Project Work	P	Summer Internship	2	2
			Major Research Project	4	4
	<b>Total Credit</b>				<b>97</b>

## M.A. ECONOMICS

1. The courses of study for MA (Economics) Examination shall extend over a period of two years divided into four semesters with an examination at the end of each semester. System of Examination as per university ordinance 31.
2. Grading will be done on 8 point scale A+ at 10, A at 9, B+ at 8, B at 7, C+ at 6, C at 5, D at 4 and F at 2 in the first attempt. In the repeated second attempt the 8 point scale will be A+ at 9, A at 8, B+ at 7, B at 6, C+ at 5, C at 4, D at 3 and F at 2.
3. Each student has to appear in at least two internal tests and End semester examination; otherwise the student will be awarded F in the concerned subject.
4. Out of three internal assessments, best two will be considered along with end semester examination marks.
5. Scores will be converted to grades as follows:-

Letter Grade	Grade Points	Description	Range of Marks (%)
O	10	Outstanding	90-100
A+	9	Excellent	80-89
A	8	Very good	70-79
B+	7	Good	60-69
B	6	Above Average	50-59
C	5	Average	40-49
P	4	Pass	35-39
F	0	Fail	0-34
Ab	0	Absent	Absent

6. For a Two year programme, the graduating grade point average (GGPA) is determined on the basis of best of 104 actual credits plus 16 Virtual Credits totalling 120.
7. If SGPA / CGPA of any student fall below 4.00 any time, the student is asked to leave the program. He may be eligible for re- admission as a fresh student.
8. The conversion of GGPA. into percentage will be as follow to facilitate its application in other matter: -  
—Percentage marks =  $8.1 + 8.4 *GGPA$ .
9. 40 marks of comprehensive viva will be allotted for over all classroom participation/Seminar/ Guest lecture and other co-curricular activities of the institute/university.

**MA (ECONOMICS)**

S.No	Core	Elective Discipline	Elective Generic	Soft Skill	Ability Enhancement
1	Theory of Consumer Behavior and Production	Environmental Economics	Entrepreneurship	Communication & Personality Development	
2	Macro Economics	Economics of Social Sector & Gender	Financial Market	Demography	
3	Public Economics	Mathematical Economics-I	<b>Or Subjects offered by other UTD's</b>		
4	Mathematics for Economics	Econometrics-I			
5	Statistics for Economics	Economics of Industries-I			
6	Advance Agricultural Economics				
7	Theory of Market Distribution	Labour Problems & Social Welfare			
8	Theories of Money and Banking	Mathematical Economics II			
9	Statistical Inferences and Research Methods	Econometrics II			
		Economics of Industries- II			
10	Rural Economics	Industrial Relation and India's Legislation-II			
11	International Economics				
12	Economics of development and Growth				
13	Welfare Economics				
14	India's Foreign Trade & International Institution				
15	Indian Economic Policy				

<b>M.A (Economics) I SEMESTER July 2019</b>		
Sub.Code	Subject Name	credits
211C	Theory of Consumer Behavior and Production(core)	3
212C	Macro Economics (core)	3
213C	Public Economics (core)	3
214C	Mathematics for Economics(core)	3
215C	Statistics for Economics(core)	3
216S	Communication and personality development (Soft skills)	3
21V	Comprehensive viva voce	4
	<b>Total credits</b>	<b>22</b>

<b>M.A (Economics) II SEMESTER January 2020</b>		
Sub.Code	Subject Name	credits
221C	Theory of Market Distribution (core)	3
222C	Theories of Money and Banking (core)	3
223C	Advance Agricultural Economics	3
224C	Statistical Inferences and Research Methods (core)	3
225C	Rural Economics (core)	3
226S	Demography	3
227A	Computer Applications (Ability Enhancement)	3
22V	Comprehensive viva voce	4
	<b>Total credits</b>	<b>25</b>

<b>M.A (Economics) III SEMESTER July 2020</b>		
Sub.Code	Subject Name	credits
231C	International Economics (core)	3
232C	Economics of development and Growth (core)	3
233C	Welfare Economics (core)	3
234D	Environmental Economics ( Elective Discipline)	3
235DA	Mathematical Economics-I ( Elective Discipline)	3
236DA	Econometrics-I ( Elective Discipline)	3
235DB	Economics of Industries-I ( Elective Discipline)	3
236DB	Labour Problems & Social Welfare ( Elective Discipline)	3
237G	Financial Market (Elective Generic)	3
238P	Term Paper or Summer Internship	2
23V	Comprehensive viva voce	4
	<b>Total credits</b>	<b>27</b>

<b>M.A (Economics) IV SEMESTER January 2021</b>		
Sub.Code	Subject Name	credits
241C	India's Foreign Trade & International Institution ( Core)	3
242C	Indian Economic Policy ( Core)	3
243D	Economics of Social Sector & Gender ( Elective Discipline)	3
244DA	Mathematical Economics- II ( Elective Discipline)	3
245DA	Econometrics- II ( Elective Discipline)	3
244DB	Economics of Industries- II ( Elective Discipline)	3
245DB	Industrial Relation and India's Legislation-II ( Elective Discipline)	3
246P	Dissertation + Viva	4
24V	Comprehensive Viva Voce	4
	<b>Total credits</b>	<b>23</b>

## First Semester

### 211C - Theory of Consumer Behavior and Production (Core)

**Objective: To provide the knowledge about consumer behaviour and decision making pertaining to Market and Production.**

1. General Introduction to Micro /Macro/Difference between Micro & Macro and their interrelations, positive & normative Economics Analysis, production possibility curve.
2. Utility Analysis, Cardinal Utility the law of Diminishing Marginal Utility, The law of equipmarginal utility and Ordinal Utility Indifference curves analysis, Price effect, Income Effect & Substitution Effect. Indifference curve and Budget line, Concept of consumer surplus and its applications in economics.
3. Law of Demand & Supply, Derivation of demand curve from Price Consumption curve, market demand, Changes in demand and supply and their quantity. Elasticity- concept of elasticity of demand, its types & their applications.
4. Revealed Preference Theory, Consumer choice under uncertainty, Hicksian revision of demand theory. Recent development in the theory of market demand. Linear Expectation
5. Theory of Production:- Production function, Laws of production, Isoquant and producers equilibrium, Expansion path, production function of multi product firm, Law of Variable Proportions - Returns to scale, Economies and diseconomies of scale. Producer's equilibrium – producer surplus, elasticity of substitution. Cobb- Douglas production function.

#### Basic Recommended:

1. Michael Perkin, (1996) Economics 3rd Edition, Addison Westey Publishing Company, Inc. U.S.A.
2. Stigler G. (1996) Theory of Price, 4th Edition, Prentice Hall of India, New Delhi.
3. Samulson P.A. and W.O. Nordhaus (1998) Economics 16th Edition Tata Mc Gram Hill, New Delhi
4. Dewett K.K. Modern Economic Theory, S. Chand & Company Ltd., Revised Edition 2005.
5. Ahuja H.L. Modern Economics 13th Edition, 2008, S.Chand and Company Ltd., New Delhi.
6. Layard P.R.G. and A.W. Walters (1978) Micro – Economic Theory, Mc Gram Hill, New York.
7. Kreps David M.(1990) A Course in Micro Economic Theory Princeton University Press, rencetion. 21
8. Sen A. (1999) Micro Economics Theory and Application , Oxford University Press , New Delhi
9. Broadway R.W. and Bruse (1984) Welfare Economics, Busil Blackwell, London.
10. Varian H. (2000) Microeconomic Analysis, W.W Norton New York.
11. Koutsoyiannis, A. (1979), Modern Microeconomics, 2nd edition Macmillan Press, London.
12. Chaturvedi, Gupta and Pal (2002) Business Economics: Text and Cases Galgotia Publishing Company, New Delhi.
13. Misra S.K. and V.K. Puri (2001): Advanced Microeconomic Theory, Himalaya Publishing House, New Delhi.

## 212C - Macro Economics (Core)

**Objective: To provide the conceptual knowledge of macroeconomic variables for a national economy.**

1. Nature of Macro Economics, Basic Concepts Stock and Flow Variables, Functional relationships. National Income and its measurement- Importance of National Income. Estimation methods of National Income and Economic Welfare, National Income Estimation in India.
2. Theories of Employment- Classical Theory, Say's Law of Market, Classical Model with and without saving and Investment, Criticism of the Model.
3. Keynesian Model of aggregate demand and supply. Keynes Vs Classicals, Criticism of the Model. Types and Trend of Unemployment in Indian Economy.
4. Income Determination in Closed and Open Economy (two, three and four sector model), Concept of Multiplier - Investment, Government, Tax, Balanced Budget and Foreign Trade.
5. Theories of Consumption and Investment-concept of consumption function, APC and MPC. Factors affecting consumption. Theories of consumption –Absolute, relative, life cycle, Permanent income Hypothesis.
6. Investment Function, Determinants of Investments, MEC and MEI, Dynamic Multiplier. Saving function and Paradox of thrift. Trend of Consumption, Saving and Investment in India.

### **Books Recommended:**

1. Ackley, G. (1978), *Macroeconomics: Theory and Policy*, Macmillan, New York.
2. Blackhouse, R. and A. Salansi (Eds.) (2000), *Macroeconomics and the Real World (2 Vols.)*, Oxford University Press, London.
3. Branson, W. a. (1989), *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.
4. Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
5. Hall, R. E. and J. B. Taylor (1986), *Macroeconomics*, W. W. Norton, New York.
6. Heijdra, B. J. and V. Frederick (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
7. Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
8. Edey, M. and A. T. Peacock (1967), *National Income and Social Accounts*, Hutchinson University Library, London.
9. Rao, V. K. R. V. (1983), *India's National Income: 1950 to 1980*, Sage Publications, New Delhi.
10. Duesenberry, J. S. (1949), *Income, Saving and the Theory of consumer Behaviour*, Harvard University Press, Harvard.
11. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley.
12. Culbertson, J. M. (1968), *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogakusha, Tokyo.

## 213C - Public Economics (Core)

**Objective: To develop the conceptual framework about government's public economic policies and annual budgeting.**

1. Public Choice Voting and Resource Allocation, Public Choice analysis, The Growth of Government significance Failure.
2. Role of Govt, in Organized Society - Govt, as an agent for Economic Planning & Development Concept of Public Goods, Private Goods and Merit Goods. Theory of Maximum, Social Advantage Theory - Dalton, Pigous Musgrav.
3. Public Expenditure - Wagner's Law of Increasing State Activities, Wiesman, Peacock hypothesis. Effects of Public Expenditure Efficiency Effect, Incentive Effect, Allocative Effect on Distribution, Employment, Economic Stability & Economic Development. Dalton's Norm of Public Expenditure, Fiscal policy and its objectives.
4. Economics of Taxation - Canons of Taxation, Taxable Capacity, Factors Determining Taxable Capacity, Its Significance. Theories of Taxation Benefit Theory, The Cost Service Theory and Ability to Pay Theory, Incidence of Taxes. Effects of Taxation Efficiency Effect, Incentive Effect, Allocative Effect. Effect on Distribution, On Employment, On Economic Stability.
5. Debt- Public Debt & Economic Growth, Public Debt and Inflation, Public Debt as a means of regulating economy. Debt Burden, Debt Redemption. Defect financing.
6. Fiscal Management in Federal Structure-Problems of Fiscal Federalism. Finance Commission Center – State Relationship. India Tax Structure.

### **Books Recommended:**

- 1 डॉ. एस.के. सिंह – लोक वित्त, साहित्य भवन पब्लिसर, आगरा 2008
- 2 Dr. S.K. Singh- Public Finance, S.Chand Pub. 2008
- 3 Sundram K P M, Andley K.K.- Public Finance, S.Chand Pub. 2003
- 4 डॉ. वी.डी.नागर, डॉ. सुरेशचन्द्र शर्मा –राजस्व, गोयल पब्लिसर हाऊस, 1978
- 5 डॉ. जे.सी. वार्णोव – राजस्व, साहित्य भवन, आगरा, 1999
- 6 Dr. B.P.Tyagi – Public Finance, Jai Prakashan, Auth. 1975
- 7 M. Maria John, Kennedy- Public Finance, PHI Pvt. Ltd.2013
- 8 भाटिया एच.एल.– लोक वित्त, विकास पब्लिकेशन 2008
- 9 डॉ. बी.पी. त्यागी– लोक वित्त, जयप्रकाशनाथ एंड कं. 2004
- 10 Late. V.G.Mankar, Prof. L.S.Sharma- Public Finance Himalaya Pub. 2001
- 11 Modern Public Finance, Herper Bernard P., AITBS Pub.2006
- 12 Public Finance- Andley
- 13 R.K. Lekhi, Public Finance



## 214C - Mathematics for Economics (Core)

**Objective: This paper provides the basic mathematical approach to understand economic principles.**

**UNIT - I Basic Concepts:** Number system, Venn diagram, Functions and their graphs; Logarithms and exponents

**UNIT - II Equations** – Simple, quadratic and simultaneous and Identities; Equations of a straight line, concept of slope; Equation and interpretation of Rectangular Hyperbola

**UNIT – III Series** – Arithmetic and Geometric series; Concept of Rate of growth, Present Value, Annuities and their measurements

**UNIT – IV Simple Differentiation** – Concepts and application of the concepts in economics: Concept of elasticity; Elasticity of demand; Average and Marginal functions; Interrelationships among total, marginal and average cost and revenues

**UNIT V Integration** – Concepts and application in Consumer surplus

**UNIT VI Matrices and Determinants- Types of Matrix, solving simultaneous linear equation using Matrices , uses of Matrices in Economics.**

### Books Recommended:

1. Allon R.G.D.- Mathematical Analysis for Economics, AITBS Pub. 1997
2. G.M.K.Madnani – Mathematical Economics, Oxford University 2003
3. M.Ray / Har Swarup Sharma Mathematics & Statistics Ramprasad & Sons 1982
4. Ajay Goel, Alka Goel - Mathematics & Statistics Tacman allied Pub. 2014
5. Agrawal R.S. Mathematics for MBA , S.Chand & Co. Ltd. 1995
6. Alpha C. Chiang- Fund. Methods of Mathematical Economics, 1967
7. GMK Madnani, B.C.Mehta Mathematics for Economics,2005
8. Button Dr. C.K., Anil Rajput- Business Mathematics, Delhi-2010
9. Taro Yamane- Mathematics for Economics- PHI Pub. 2011
10. S.C.Gupta, V.K.Kapoor- Fundamentals of Mathematical Statistics, Sultan Chari & Sons 1994

## 215C - Statistics for Economics (Core)

**Objective: This paper provides the statistical and mathematical approach to understand economic principles.**

1. Definition, Importance & Scope of statistics, Revision of Measures of Central tendency
2. Measures of dispersion and skewness – Range, Quartile deviation, Mean deviation, Standard deviation. Correlation Analysis: Karl Pearson coefficient of correlation, Spearman's rank correlation, and concept of probable Error.
3. Index Numbers: Concept, types, application and problems in construction of Index numbers, The chain index numbers, Base shifting and deflating the index numbers, cost of living index numbers.
4. Analysis of time Series - Introduction, application, Components of Time Series. Measurement of Trend by Graphic Method, Semi-Average & Moving Average method and Least Squares Method.
5. Probability and its Theorems: Concepts & Definition, Calculation of Probability, Theorems Addition Theorem and Multiplication Theorem. Probability Distribution: Normal, Binomial & Poison Distribution.
6. Regression Analysis: Concept, Regression lines, regression coefficients, equations and prediction. Interpolation and extrapolation

### Books Recommended:

1. Levin R I./Davi & S. Robin – Statistics for Management  
Pearson Education Pub. 2002
2. शुक्ल डॉ. एस.एम. – सांख्यिकीय के सिद्धान्त – साहित्य भवन –1983, 1992
- 3 D.N. Elhance – Fundamentals of Statistics – Kitab Mahal – 2007
- 4 Agrawal D.N. – Fundamentals of Statistics –
- 5 सिंघरवाडि.या एवं कावडिया – सांख्यिकीय के सिद्धान्त
- 6 N.K. Sharma – Statistical Techniques – Mongadeep Pub- 1996
- 7 Amir & Aczel – Joyvel Saurderpondian –  
Complete Business Statistcs– Tata Mogre Kiv Pub. 2006
8. B.C. Mehta – प्रारंभिक सांख्यिकीय – राजस्थान हिन्दी ग्रंथ, जयपुर – 1986, 1990
9. Bhardwaj R.S. Business Statistcs – Exce Book Pub.-1999
10. B.C. Gupta- Business Statistcs - Business Statistcs, Himalaya Pub. 1994
11. डॉ. रविन्द्रनाथ मुखर्जी – सामाजिक शोध एवं सांख्यिकीय-विवके प्रकाशन –1992
12. Nabendu Pal – statistics – PHI Pub.-2005
13. N.K.Viswanathan - Business Statistcs, Pearson Pub.-2011

14. Davis & Pecor- Business Statistics, Oxford Universtiy , 2014
15. Rutalfs Frettrd , M.S. Wilson – Statistcs Methods Elsevier Pvt. Ltd. 2010
16. J.K.Sharma - Business Statistcs, Pearson Pub-2012
17. Dr. S.M. Shukla, Dr. S.P.Sabai – Theory & Practices, Sahitya Pub. 2000
18. J.S. Chandan – Statistics for Business & Economics, Vikas Pub. 1996
19. Harry Frank Stven C. Altheoan – Statistics – Cambridge University, 1994
20. कैलाशनाथ नागर – सांख्यिकीय के मूल तत्व—मीनाक्षी प्रकाशन ,1995
- 22 Dr. S.P. Gupta – Statistics Methods – मेरठ दिल्ली, 1997–2008
- 23 J.K.Sharma-Fundamentals of Business Statistcs- Vikas Pub.2014
- 24 G.V.Shenoy, V.K.Shrivastava- Business Statistcs-Weley Pub.1992
- 25 C.B.Gupta-An Introduction to Statistical Methods- Vikas Pub.
- 26 S.C. Gupta- Statistical Methods, 1977-1992
- 27 S.P.Gupta- सांख्यिकीय के सिद्धान्त, सुल्तान एण्ड कम्पनी 1992
- 28 S.C. Gupta- सांख्यिकीय के सिद्धान्त., 1992
- 29 N.G.Das- Statistical Methods, 2009

## 216S – Communication and Personality Development (Soft Skills)

**1. Framework to communication :** - Defining communication, process of communication, principles of effective communication, importance of business communication and feedback

**2. Factors affecting communication:-** Physical, Mechanical and Psychological barriers to communication. Effective listening – types and Essentials of effective listening

**3. Channels, types and forms of communication:-** Channels, Verbal, Non-verbal, Formal, Informal, Internal, External and Communication networks

**4. Enhancement of creative writing ability:-** -Vocabulary building (wordlist) and learning idioms, Adaption and selection of words, construction of clear sentences and paragraphs.

- writing short articles on a topic

-designing an advertisement for a product

**5. Fundamentals of letter writing:-** Basic patterns and format of Business Letters -Application & Notice– Leave applications, Notice -Sales letter – Placing orders, Complaint letters

-Bank correspondence- Informing bank about lost cards, Complaint letter, Request a loan.

**6. Enhancement skills / employability skills:** -Employment Messages: Writing Resumes, Covering letter, Job Application, Resignation Letter -Interview skills: Types of interview, Preparing for an interview, Attire for an interview, how to handle stress interview,

**Activities:** Presentations, Extempore and Group discussion, Mock interviews. Review of newspaper article as weekly activity. Wordlist and idioms to be provided by faculty

### Recommended Books:

1.Business Communication – K.K.Sinha, Galgotia Publishing Company

2.Business Communication – Chhabra.T.N. , Sun India Publication, 2005

3.Business Communication – Parag Diwan, Excel Books

4.Essentials of Business Communication – Rajendra Pal, Sultanchand Publication, 2000

5.Business Communication-- R.K.Madhurkar,Vikas Publishing House Pvt. Limited

<b>M.A (Economics) II SEMESTER January 2020</b>		
Sub.Code	Subject Name	credits
221C	Theory of Market Distribution (core)	3
222C	Theories of Money and Banking (core)	3
223C	Demography (core)	3
224C	Statistical Inferences and Research Methods (core)	3
225C	Agriculture and Rural Development (core)	3
226SF/SG	French/German(Soft skill)	3
227G	Fundamental of Management (Elective Generic)	3
<b>228A</b>	<b>Computer Applications (Ability Enhancement)</b>	<b>3</b>
22V	Comprehensive viva voce	4
	<b>Total credits</b>	<b>28</b>

### **221C- Theories of Market & Distribution (Core)**

**Objective: To develop in- depth understanding of firms and market, pricing strategies and factor pricing.**

1. Theory of cost: - Traditional and Modern theory of Cost - Short run and Long run costs, Engineering cost curves- Short and Long run Engineering cost, the Different type of costs. Cost Functions, Cost curves, Iso-cost curves, traditional and modern cost analysis. Revenue curves and breakeven points.
2. Concept of Market – types and characteristics. Perfect competition- short run and long run equilibrium of the firm and industry, price and output determination, shutdown point for a firm.
3. Monopoly- short run and long run equilibrium, degrees of price discrimination, welfare aspects, Price and output determination under monopoly and bilateral monopoly. Calculation of Monopoly power. Monopoly control and regulation. Predictions of the monopoly model in dynamic situation- shift in the market demand, imposition of a tax.
4. Monopolistic competition – general equilibrium and Chamberlain approach to equilibrium, equilibrium of the firm and group equilibrium. Product differentiation and selling costs, excess capacity under monopolistic competition, criticism of monopolistic competition
5. Oligopoly\_ -: Collusive and Non- collusive oligopoly: Cournot’s, Chamberlin’s, Paul Sweezy-Kinked demand model. Cartel, price leadership models;
6. Pricing policies- Types of pricing strategy- Cost based, profit based, competition based etc.
7. Distribution: Neo classical approach - Marginal productivity theory. Classical and modern theories of Rent, Wages, Profit and Interest.

**Basic Recommended:**

1. Michael Perkin (1996) Economics 3rd Edition, Addison Westey Publishing Company, Inc. U.S.A.
2. Stigler G. (1996) Theory of Price, 4th Edition, Prentice Hall of India, New Delhi.
3. Samuelson P.A. and W.O. Nordhaus (1998) Economics 16th Edition Tata Mc Gram Hill, New Delhi
4. Dewett K.K. Modern Economic Theory, S. Chand & Company Ltd., Revised Edition 2005.
5. Ahuja H.L. Modern Economics 13th Edition, 2008, S.Chand and Company Ltd., New Delhi.
6. Layard P.R.G. and A.W. Walters (1978) Micro – Economic Theory, Mc Gram Hill, New York.
7. Kreps David M.(1990) A Course in Micro Economic Theory Princeton University Press, rencetion.21
8. Sen A. (1999) Micro Economics Theory and Application , Oxford University Press , New Delhi
9. Broadway R.W. and Bruse (1984) Welfare Economics, Busil Blackwell, London.
10. Varian H. (2000) Microeconomic Analysis, W.W Norton New York.
11. Koutsoyiannis, A. (1979), Modern Microeconomics, 2nd edition Macmillan Press, London.
12. Chaturvedi, Gupta and Pal (2002) Business Economics: Text and Cases Galgotia Publishing Company, New Delhi.

### **222C- Theories of Money and Banking (Core)**

**Objective: This paper develops the calibre of the students to understand the banking procedure with its command on money inflow in the market**

1. Concept of Money and components of money supply, Credit Creation, Money Multiplier, Monetary, Policy, Instruments of Monetary Controls, its role and effectiveness. RBI's approach to monetary market-review of current five monetary policies.
2. Theories of Value of Money- Classical theories- Fisher, Cambridge view. Keynesian Theory of Money and Prices, Milton Friedman Modern Quantity Theory of Money.
3. Inflation- Measurement and types of Inflation, Demand and Supply side Inflation, Effects of Inflation, Methods to Check Inflation, Deflation and Stagflation. Anti-Inflationary Policy, trend of Inflation in the last decade.
4. Inflation and Unemployment, Philips curve- Long and short run. Adaptive expectation theory.
5. Banking Systems in India. Types of Banks. Commercial Banking Origin & Growth, Functions and role of Commercial Banks in a Developing Economy. New Trends in Commercial Banking. RBI –origin, structure and regulation.
6. Business Cycles Meaning and Nature, Theories of trade Cycle Schumpeter, Keynesian, Samuelson and Hicks.
7. Theories of interest rate determination-Liquidity preference theory & IS-LM Analysis. Overview of components of Money Supply. Monetary and fiscal policy in the open economy- The Mundell -Fleming Model, The case of imperfect capital mobility, The case of perfect capital mobility.
8. Money demand- Theory of the transaction demand for money, Extension of Keynes's Theory of the demand for money as a store of wealth, Instability of money demand.

#### **Books Recommended:**

1. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
2. Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
3. Branson, W. a. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
4. Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.
5. Hall, R. E. and J. B. Taylor (1986), Macroeconomics, W. W. Norton, New York.

6. Heijdra, B. J. and V. Frederick (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
7. Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
8. Edey, M. and A. T. Peacock (1967), *National Income and Social Accounts*, Hutchinson University Library, London.
9. Rao, V. K. R. V. (1983), *India's National Income: 1950 to 1980*, Sage Publications, New Delhi.
10. Duesenberry, J. S. (1949), *Income, Saving and the Theory of consumer Behaviour*, Harvard University Press, Harvard.
11. Gordon, R. and S. G. Harris (1998), *Macroeconomics*, Addison Wesley.
12. Culbertson, J. M. (1968), *Macroeconomic Theory and Stabilization Policy*, McGraw Hill, Kogekosh, Tokyo.
13. E.J. Shapiro W.H. Bransin - *Macro Economic Analysis Macro M.L.Jhingan - Macro Economic Analysis Macro*
14. W.H. Bransin *Macro Economic Theory and Policy*

### **223C- Advance Agricultural Economics**

**Course Objective:** The objective of this course is to familiarise the students of Master degree with the basic concepts, theories and approaches of agricultural economics.

**Unit-I** Agricultural Economics: Meaning, Scope and Role in economic development; Interface between Agriculture and Industry; Schultz's prescription of transforming traditional agriculture; Mellor's model; Land Reforms, Agriculture Development during Planning Periods; Green Revolution; Growth, Productivity and Regional Disparities in Indian Agriculture; Agrarian Crisis and Farmer Suicide

**Unit-II** Farm Size and Productivity Relationships, Risk and Uncertainty in Agriculture, Environmental Issues in Agriculture; Farm Management: Basics; Agricultural Marketing: Existing Structure, Problems, Costs and Efficiency in the markets, Marketing Reforms, Innovations in Agricultural Marketing System.

**Unit-III** - Agricultural Price Policy in India-instruments and assessment; Food Security and Public Distribution System (PDS), Agricultural Finance: Role, Agencies, problems, Policies, Inter-linked Markets, Value Chain, Market Reforms, Indebtedness.

**Unit-IV-** Cooperative: Organisation, Structure, Functions, Inter-sectoral terms of trade; Agricultural subsidies - Nature, Trends and Distributional Implications; Agricultural Exports: Nature, Trend, Composition; WTO and Indian agriculture.

#### **Suggested Readings**

Acharya, S.S. and Agarwal, N.L. (2012). *Agricultural Marketing in India*. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

Bansil, P.C. (2017). *Economic Problems of Indian Agriculture*. Daya Publishing House, New Delhi.

Bhalla, G. S. and Gurmail S. (2001). *Indian Agriculture: Four Decades of Development*. New Delhi: Sage Publications.

Chand, R. (2012). Development Policies and Agricultural Markets. *Economic and Political Weekly*, 47 (52): 53-63.

Chand, R., S S Raju, S. Garg and L.M. Pandey (2011). *Instability and Regional variation in Indian Agriculture*, NCAP, New Delhi.

## 224C- Statistical Inference and Research Methods (Core)

**Objective: to develop the research insight and acquaint them with application of statistical inference**

- 1. Research Methodology:** An Introduction - Meaning of Research, Objectives of Research, Motivation in Research, Types of Research, Significance of Research, Research and Scientific Method, Research Process.
- 2. Defining the Research Problem** - What is a Research Problem?, Selecting the Problem, Necessity of Defining the Problem, Technique Involved in Defining a Problem.
- 3. Research Design** - Meaning of Research Design, Need for Research Design, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs.
- 4. Data Collection** - Introduction, Experiments and Surveys, Collection of Primary Data, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method.
- 5. Sampling and Statistical Inference** Parameter and Statistic, Sampling and Non-Sampling Errors, Sampling Distribution, Degree of Freedom, Standard Error, Central Limit Theorem, small sample and large sample.
- 6. Estimation & Testing of Hypothesis** - What is a Hypothesis?, Basic Concepts Concerning Testing of Hypotheses, Tests of Hypotheses, Critical Value and Decision Rule, Procedure for Hypothesis Testing, Hypothesis Testing for – Mean, Proportion, Variance, Difference of Two Mean, Difference of Two Proportions, Difference of Two Variances, Limitations of Tests of Hypothesis.
- 7. Chi-square Tests Test** - of Difference of more than Two Proportions, Test of Independence of Attributes, Test of Goodness of Fit, Caution in using Chi-Square Tests.
- 8. Analysis of Variance** The Anova Technique, The Basic Principle of ANOVA, One Way ANOVA, Two Way ANOVA, Linear Regression Analysis Dependent and Independent Variables, Other Nonparametric Methods - Sign Tests, Wilcoxon Signed Rank Sum Test for Single Population, Mann Whitney U Test, Spearman's Rank Correlation, Some Features of Non -Parametric Tests. Using SPSS.
- 9. Interpretation and Report Writing** - Meaning of Interpretation, Technique of Interpretation, Precaution in Interpretation, Significance of Report Writing, Different Steps in Writing Report, Layout of the Research Report, Types of Reports, Oral Presentation, Mechanics of Writing a Research Report, Precautions for Writing Research Reports, Conclusions.

### **Text Books -:**

1. Text Book C. R. Kothari, Gaurav Garg,
2. Research Methodology Methods and Techniques , New Age International publishers, Third Edition, 2014.
3. P.C. Tripathi, Research Methodology, Sultan Chand & sons, Education publisher, New Delhi, 2010.

### **Books Recommended:**

1. Chou, Ya-Lun, Statistical Analysis, Rinehart & Winston, New York.
2. Croxton & Cowden Applied general Statistics, Prentice-Hall, London and India.
3. Demming, W. Edward, Theory of Sampling ? John Willey & Sons, New York
4. Elhance, D. N. Fundamentals of Statistics, kitabmahal, Allahabad, 1967
5. Feller, W., An Introduction to Probability theory and its applications, John Wiley
6. Gupta, S.C. An Introduction to Statistic, Sultan Chand & co., New Delhi.
7. Gupta, S. P. fundamental of Statistic, H.P.H., Bombay, 1992.
8. Mounsey, J., Introduction to statistical calculations, English Universities Press, London.
9. Parzen, E ., Modern Probability Theory and its applications, John Willey.
10. R. G.D.Allen - Statistics for Economics
11. Metha and Madnani - Mathematics for Economists.
14. Shukla & Sehay - Statistical Methods, sahitay publication 2012.



## 225C- Rural Economics

**Course Objective:** The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of rural economics.

**Unit-I** Rural Economy: rural dynamics, characteristics, problems, challenges and opportunities; Responding to Changing Agrarian Economy; Rural Farm and Non-Farm Sector: Employment and Barriers; Rural Employment Generation Programmes: NRLM, MGNREGA.

**Unit-II** Approaches to understand rural development: Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA); Sustainable Rural development, Technology for rural growth: ICT, mobile, successful programmes; Business Markets for village economy.

**Unit-III** Planning for Rural Development: levels, functions, decentralization, methodology of micro-level planning, for block and district level planning; Organizations for rural development: criteria, government organisations, PRIs, Cooperatives, Voluntary Agencies/NGOs, Corporations; Community Capacity Building, Common Property Resources.

**Unit-IV** Rural Entrepreneurship: role, programmes, role of institutions, Agri-preneurship; Micro-Finance Institutions (MFIs): role of MFIs, Self Help Groups; Micro, Small and Medium Enterprises in Rural India; Rural and micro Insurance; Rural Industrialization

### Suggested Readings

Churchill, Craig (2006). *Protecting the poor: A micro insurance compendium*, International Labour Office, Geneva.

Government of India (n.d.) *MSME at a Glance*, Ministry of Micro, Small and Medium Enterprises.

IDFC Rural Development Network (2013). *India Rural Development Report 2012/13*. Delhi: Orient Black Swan.

Mukherjee, A., (2004). *Participatory rural appraisal: methods and applications in rural planning: essays in honour of Robert Chambers* (Vol. 5). Concept

Publishing Company.

Narula, U. (2010). *Dynamics of Indian Rural Economy: Growth Perspective*, Atlantic Publishers, New Delhi.

Parthasarathy, G. (2003). *Economic Reforms and Rural Development in India*. Academic Foundation.

Reddy, K. V. (2012). *Agriculture and Rural Development*, Himalaya Publishing House.

Schaeffer, P.V. and Loveridge, S. (2000). *Small Town and Rural Economic Development: A case studies Approach*, Praeger Publisher.

Singh, B.M. and Namboodiri, KVN (2007). *Unleashing Rural Entrepreneurship*, Icfai University Press, Hyderabad.

Singh, K. (2009). *Rural Development: Principles, Policies and Management*, Sage Publications.

## 226S Demography (Soft Skill)

**Unit-I Basic Concepts, Indicators and Theories:** Meaning and Scope of demography, Population and Economic Development; Vital Rates – Fertility, Mortality, Age Pyramids, and Life Tables; From Development to Population; Theory of Demographic Transition; Historical Trends; Adjustment of Birth and Death Rates; Household Choice Models; From Population to Development; Malthusian View; Growth Impact; Population and Environment; Population and Innovation; Markets and Inputs.

**Unit-II Population Projection:** National Projection of Total Population and Age-Sex composition – Mathematical Methods and Cohort-Component Methods; Methods of National & Sub-National Projection of Population; Projection of the Economically Active Population; Concepts of Stable, Stationary, and Quasi-Stationary Population.

**Unit –III Population and Population Policy in India:** Major demographic features of India's population – Spatial, Age, Sex, Structure of Indian Population; Birth rate, Death rate, Life Expectancy & Infant Mortality; Trends & Patterns; Evaluation of family welfare programmes in India - National Population Policies since independence.

**Unit-IV Aging and Demographic Change:** Aging Process, Ageing around the world, The impact of demographic changes, The changing balance of age groups, Social, Economic, and Demographic Changes among the Elderly, Dependency ratio, Generational accounting and Pensions crisis; Social Groups and Family Size.

### Suggested Readings

- Bogue, D.J. (1971), *Principles of Demography*, John Wiley, New York.
- Bose, A. (1996), *India's Basic Demographic Statistics*, B.R. Publishing Corporation, New Delhi
- Choubey, P. K. (2000). *Population Policy in India*. New Delhi: Kanishka Publications.
- Cochrane, S. H. (1975). Children as by-products, investment goods and consumer goods: a review of some micro-economic models of fertility. *Population Studies* 29(3): 373-390.
- Dandekar, V.M. (1998). Population Front of India's Economic Development. *Economic and Political Weekly*. 22(17): 837-842.
- Dave, P., & Mehta, P. (2008). *Mental Health and Aging Women: Important Correlates*. New Delhi: Gyan Publishing House.
- Ehsanul, H. (2007). *Sociology of Population*. New Delhi: Macmillan.
- Hustedde, Ronald J., Ron Shaffer and Glen Pulver. (2005). *Community Economic Analysis: A How to Manual*. Rev. ed
- Ishwar M. (2001). *Ageing and Human Development: Global Perspectives*. New Delhi: Rawat.
- Novell, C. (1988), *Methods and Models in Demography*, Bellhaven Press, London.
- Simon, J. L. (1992). *Population and Development in Poor Countries*. Princeton: Princeton University Press.

## 227A – Computer Application (Ability Enhancement)

**Objective: To introduce the software knowledge by which one can do research work conveniently and efficiently.**

**Unit I.** -Anatomy of computer, operating system concepts, hardware, software concepts & terminology, networking--- definition, types, applications. Introduction to GUI.

**Unit II** -Introduction to MS-Office— MS Word: creating documents,formatting features, standard toolbar, text formatting, header & footer, mail-merge, macro, insertion of files & pictures. MS-Excel- Construction of worksheet and inserting data according to its characteristics, creation of charts and graphs .Use of statistical tools including measures of central tendency, coefficient of correlation and regression and application of various tests for hypothesis testing.

**Unit III** - MS- Power point – Create power point presentation with the help of different presentationstyles,editing slides, various views of PowerPoint presentation, insertion of chart and pictures, animation and transition effects, creation of photo album.

**Unit IV** -Use of SPSS – Method of preparing data sheet and entering data according to its characteristics , use of various statistical tools on SPSS. Application of t-test, paired t test, one way ANNOVA,Two way ANNOVA, Chi-Square test.

**Unit V** -Functions to estimate descriptive statistics – Measures of central tendency and variation, covariance& coefficient of correlation, estimation of simple linear regression.

**Unit VI**- Internet basics& Applications—Internet & its uses, Intranet & Extranet, web pages, websites, web servers, web browser, internet domains, URL's, IP address, search engines.

### Recommended Books:

- 1.PradeepK.Sinha. Priti Sinha Computer Fundamentals, Fourth Edition, BPB Publications.
- 2.Rajaraman , V. (1996) ,Fundamentals of Computers , Prentice Hall of India , New Delhi .
- 3.Techniques and Applications, Prentice Hall, Englewood Cliffs, NJ.
- 4.Wood, M.B. (1983), Introduction Computer Security, Broadman Associates, Delhi.

M.A (Economics) III SEMESTER July 2016		
Sub.Code	Subject Name	credits
231C	International Economics (core)	3
232C	Economics of development and Growth (core)	3
233C	Welfare Economics (core)	3
234D	Environmental Economics ( Elective Discipline)	3
235DA	Mathematical Economics-I ( Elective Discipline)	3
236DA	Econometrics-I ( Elective Discipline)	3
235DB	Economics of Industries-I ( Elective Discipline)	3
236DB	Labour Problems & Social Welfare ( Elective Discipline)	3
237G	Financial Market (Elective Generic)	3
238P	Term Paper or Summer Internship	2
23V	Comprehensive viva voce	4
	<b>Total credits</b>	<b>27</b>

**Third Semester**  
**231 C – International Economics (Core)**

**Objective: To provide the knowledge about International trade, Terms and conditions of the trade.**

1. Distinguishing features of Interregional and International trade; Importance and Scope of International Trade. International division of labour and specialization; Smith's theory of Absolute Difference in costs; Ricardo's theory of comparative differences in costs and its application in underdeveloped countries.
2. Mills' theory of Reciprocal Demand; Concept of Offer Curves; Explanation of Mills' concept of Reciprocal Demand with the help of Marshall's Offer Curves. International Trade Equilibrium; Some analytical tools-Offer curves Production Possibility Curves; the Community Indifference Curves; Equilibrium in Community Consumption and Output.
3. Harberler's Theory of Opportunity Costs; International trade under constant, Increasing and decreasing opportunity costs. The Modern Theory of Factor Endowments; its explanation under price criterion and physical criterion and its relevance in the present scenario. Its superiority over the classical theory; Leontief Paradox.
4. International trade and factor prices, Samuelson's Factor Price Equalization Theorem. The Terms of Trade- Meaning and various concepts, Factors affecting it, Terms of Trade and underdeveloped countries.
5. Tariffs meaning and types; - Effects of tariff under partial and general equilibrium; Optimum tariff and welfare; Effects of tariff on income distribution, Stapler- Samuelson theorem, Dumping: Types, Objectives and effects of dumping; Current incidence of dumping in India and its impact on our economy; Anti-dumping measures.

**Books Recommended:**

1. डॉ. के.डी. स्वामी – अन्तर्राष्ट्रीय अर्थशास्त्र, सांइटिफीक पब्लि. 1990–95
2. Thomas A. Paugel- International Economics, Pub. 2015
3. Dominlok, Salventre- International Economic, Willy Pub. 2010
4. Dr. D.M. Mithani- Internation Economic, Himalaya Pub. 2004
5. BO Sodersten & Geoffroy Recd- Introduction Economic McMillion Pub. 2000
- 6 D.N. Dwivedi- International Finance, Vikas Publication 2013
- 7 झिंगन एम.एल. – अन्तर्राष्ट्रीय अर्थशास्त्र, वृन्दा. पब्लि. 2015
- 8 अग्रवाल/बरला – अन्तर्राष्ट्रीय अर्थशास्त्र,, लक्ष्मीनारायण अग्रवाल 1998
- 9 डॉ. वी.सी. सिन्हा – अन्तर्राष्ट्रीय अर्थशास्त्र, नेशनल पब्लि. हाऊस 1990?
- 10 Dr. P. Subba Rao- International Business, Himalaya Pub.2001
- 11 Cherwnilam Francis- International Economics Tata Megrawsai 1995
- 12 Ghosh Peu – International Relations, PHI Pub. 2012

- 13 Jhingam M.L. International Economics, Vrinda Pub. 2014
- 14 Carbug Robert J - International Economics, Carbug pub. 2008
- 15 Verma/ Rana - International Economics,  
Jalandhar, Sohanlal, Chand. Co.1997

### 232 C – Economics of Development & Growth (Core)

**Objective: To acquaint students with development theories and enhance their orientation about economic development.**

**1. Introduction** - Economic Development and sustainable development- Meaning, characteristic, Factors affecting them: capital, labour and technology; **Precursors to Classical Economics (Mercantilism and Physiocrates)**

**2. Classical theories of Growth-** Contributions of Adam Smith, Ricardo, Malthus, James Mill; Karl Marx and development of capitalistic economy — Theory of social change, surplus value and profit; Immutable laws of capitalist development; Crisis in capitalism — Schumpeter and capitalistic development; innovation — role of credit, profit and degeneration of capitalism; Structural analysis of development; Imperfect market paradigm.

**3. Keynesian Model of development**

**4. Growth Models I (Post Keynesian Era)** – Harrod and Domar, instability of equilibrium; Neo-classical growth models — Solow and Meade, Mrs. Joan Robinson’s growth model; Cambridge criticism of Neoclassical analysis of growth, The capital controversy.

**5. Growth Models - II** Technological progress — embodied and disembodied technical progress; Hicks, Harrod; learning by doing, production function approach to the economic growth; Total factor productivity and growth accounting; Growth models of Kaldor and Pasinetti, Golden rule of accumulation, Stability of equilibrium; Money in economic growth, Tobin, Levhari, Patinkin and Johnson; Mahalnobis model. Endogenous growth; Intellectual capital: role of learning, education and research;

**6. Theories of growth-** Theory of balanced growth; Levis model, Hirschman model; Leibenstien’s model; Nelson’s low level Equilibrium trap, Rostow’s stages of growth, dualistic development theories, Chenery’s to gap model, dependency theories of development and there critical appraisal

#### Books Recommended:

1. Kindleberger, C.P. (1977), Economic Development (3<sup>rd</sup> Edition) Mcgraw Hill, New York. M.P. Todaro (1996) (6<sup>th</sup> Ed.) Economic Develoment, Longman, London.
2. Thriwal, A.P. (1999) (6<sup>th</sup> Ed.) Growth and Development, Macmillan U.K.
3. Meir G.M. (1995) Leading Issues in Economic Development (6<sup>th</sup> Ed.). Oxford university Press, New Delhi.
4. Sen, A.K. (1990) Growth Economic, Penguin, Harmondess Worth.
5. Crossman, G. and E. Helpaman (1991). Innovation and Growth in the Global Economy, MIT Press, Cambridge,
6. Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
7. Barro, R. and X. Salai- Martin, Economic Growth, McGraw Hill, New York.
8. Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
9. Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
10. Chakravarti, S. (1982), Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.

- 11.Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- 12.Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- 13.Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- 14.Higgins, B. (1959), Economic Development, W.W. Norton, New York.

### **233 C –Welfare Economics (Core)**

#### **Objective:**

**1. Pre Paretian Welfare Economics - General Equilibrium theory-:** Interdependencies and the general equilibrium approach, The Walrasian Model (Detailed Analysis) Existence, Uniqueness and stability of an economy. The Neo-Classical excess demand approach. First Fundamental Theorem and Second Fundamental Theorem of Welfare Economics (A Mathematical Analysis) , Various Criteria of Welfare (An Overview)

**2. Paretian Welfare Economics – Pareto optimality-** Optimum exchange conditions, The production optimum, The consumption optimum; Concept of contract curve; Top level optimum; First order and Second Order Conditions of Pareto Optimality, Infinite number of non- comparable optima vs. unique social optimum; Compensation criteria-Contributions of Barone, Kaldor and Hicks; The Scitovsky double criterion; Value judgments and welfare economics, Concept of Community Indifference Map, Samuelson’s Utility Possibility Curve, Bergson’s social welfare function, , Rawls Theory of Justice, Arrow’s possibility theorem.

**3. Market Failure -:**Divergence between private and social costs; Problems of non-market interdependence;, Externalities of production and consumption; External economies and diseconomies; Problem of public goods; Pigovian welfare economics; Markets with asymmetric information, Market for Lemons, Free Rider Problem, Coase Theorem, Second best optima (Lipsey and Lancaster Theory) ; Marginal cost pricing; Cost-benefit analysis.

**4. Market Regulation as a solution to Market Failure -:**Market regulations and working of regulators Regulation in India and real situation, Reduction in Welfare compromising policies, processes and institutions Government and Welfare enhancement schemes, Concept of Corporate Social Responsibility (Self Regulation Practices and their Importance)

#### **Book Recommended:**

1. A.Koutsoyannis: Modern Microeconomics Chs.22 & 23 (Macmillan)
  2. Hal Varian – Intermediate MicroEconomics
  3. Sampat Mukherjee : Analytical Micro Economics (Exchange Production and Welfare).
  4. From Alfred Marshall to John Nash (New central book agency) (Relevant pages)
  5. Keating& Wilson: Managerial Economics Chs.9,13 (Biztantra)
  6. Baumol, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
  7. Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
  8. Pigou, A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
  9. Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
  10. Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers, Vol. 1
- 11. India Year Book**

## 234 D - Environmental Economics (Elective Discipline)

**Objective: Environment is a major issue in today's times. This paper helps to understand the nexus between environment and economic development.**

1. Measuring of Environment & Ecology, Significances of Environmental balance, Role of Economic in Environment. Nature of Environmental Economics.
2. Model of Market Failure – Environmental problems- A market failure Environmental quality A public good. Environmental problems Externalities Positive & Negative.
3. Conventional solutions to Environmental Problems : The command and control Approach, Economic solutions to Environmental problems The market approach pollution charges, Environmental Subsidies Deposit/Refund System pollution permit trading system.
4. Assessing benefits for Environmental Decision making.
5. Cost benefit Analysis in Environmental decision making
6. Conflicts between Environment Economic Development Population growth
7. Environmental Law & their implementation.

### Books Recommended

1. Baumol, W.J. and W.E. Oates (1988), The Theory of Environmental Policy (2nd Edition) CUP, Cambridge.
2. Bhattacharya, R.N. ed. (2001): Environmental Economics, An Indian Perspective, Oxford University Press, New Delhi.
3. Hanley, N.J.F., Shogren and B. White (1997) Environmental Economics in Theory and Practice. Macmillan.
4. Jarret H. ed. Environmental Quality in a Growing Economy, John Hopkins Press, Baltimore.
5. Kalpagam, (1998): Environmental Economics, Sterling Press.
6. Kolstrad, C.D. (1999): Environmental Economics, Oxford University Press, New Delhi.
7. Mehta, S, S. Mundle, and U. Sankar (1995): Controlling Pollution: Incentives and Regulation, Sage, New Delhi.
8. Murthy, M.N., A. James and S. Misra (1999): The Economics of Water Pollution in India. Oxford University Press, New Delhi.
9. Pearce, D.W and R. Turner (1991): Economics of Natural Resource Use and Environment. John Hopkins Press, Baltimore.
10. Rao, O.K. (2000): Sustainable Development, Economics and Policy, Blackwell Publishers, UK.
11. Sankar, U ed (2001): Environmental Economics, Oxford University Press, New Delhi.
12. Saxena, H.M. (2000): Environmental Management. Rawat Publishers, New Delhi.
13. Sengupta, R.P. (2000): Ecology and Economics: An Approach to Sustainable Development Oxford University Press, New Delhi.
14. State of India's Environment. The Hindu Annual Publications.
15. Tietenberg, T, ed. (1997): Economics of Global Warming, Edward Elgar, UK.
16. Blaug, Mark (1972) Introduction to Economics of Education, Penguin, London.
17. Becker, G.S. (1974) Human Capital. 2nd Edn., NBER, New York.
18. Berman, P and M.E. Khan (1993) Paying for India's Health Care, Sage

### 235 DA- Mathematical Economics – I (Elective Discipline)

**Objective: To develop analytical ability to analyse and understand economics logically and pragmatically.**

1. The nature of Mathematical Economics; Relation between Mathematical Economics and Econometrics; Equations and inequalities; Types of equations; Linear and non-linear equations and their solutions; Arithmetic and Geometric Progression and their use in Economics.
2. Derivative; Process of Differentiation; Rules of Differentiation of a function; Derivatives of higher order; Sign of derivative and nature of function; I and II order conditions for Maxima and Minima and saddle point.
3. Application of simple derivatives in Economics: - Differential coefficients and elasticity of demand, Average and marginal cost Curves and their relation, Average and Marginal Revenue Curves and their relation, conditions for profit maximization under different market conditions.
4. Differentiation of two or more variables; Partial Differentiation process and its application in Economics, Simple, Cross Partial and Total Derivatives; Rules of total differentiation.
5. The theory of Consumer Behaviour; Indifference curve; Role of Commodity Substitution (RCS), Maximization of Utility, Slutsky's Equation – important results and their interpretations.
6. The Theory of constrained cost minimization and profit maximization, Cobb-Douglas Production Function, Constant Elasticity Substitution function.

#### **Books Recommended:**

1. A.C. Chaing: Fundamental Methods of Mathematical Economics (II Ed.)
2. Mehta and Madnani: Mathematics for Economists
3. Allen, R.G.D. : Mathematical Analysis for Economics Analysis
4. G.S.Moonga: Mathematics and Statistics for Economists- Vikas Publications
5. J. M. Henderson and R. E. Quandt, Microeconomic Theory: A Mathematical Treatment, New York: McGraw-Hill, 1980.
6. An Introduction to Mathematical Economics, Badlani, Bradfield, Turner, Cengage learning
7. Mathematics for Economists: An elementary survey(2<sup>nd</sup> edition), Taro Yamane, eastern Economy Edition

### 236 DA – Econometrics -I (Elective Discipline)

**Objective: Econometrics is a tool to enhance the understanding of economic variables in the economic development.**

1. Random Variable, Expectation of Random Variable. Basics of Hypothesis Testing; Nature and Scope of Econometrics.
2. Types of data; Meaning and Methodology of Econometrics; Meaning of Causal relationship; Nature of Regression Analysis; Properties of good Estimator; Gauss-Markov Theorem.
3. Basics of Two-Variable Regression Analysis. Estimation and Hypothesis Testing; interpretation of results and their application
4. Extensions of the Two-variable Linear Regression Model. Multiple Regression Model, its Estimation and Inference; types of Non Linear Regression Models and their applications.
5. Nature, Consequences, Detection and Remedial Measures of Specification Bias, Heteroscedasticity, Autocorrelation and Multi Co linearity
6. Regression on Dummy Variables and their application.
7. Autoregressive and Distributed Lag Models; problems in estimation and their application.
8. Systems of Equations, Identification(Rank and Order Conditions) and Estimation Methods (ILS and 2SLS) of Simultaneous Equation Models.



### **Books Recommended:**

1. Gujarati, D.N. Basic Econometrics (5<sup>th</sup> Edition) MC Graw Hill New Delhi.
2. Koutsoyiannis, A., Theory of Econometrics (2<sup>nd</sup> Edition), The Macmillan Press Ltd. London
3. Maddala, G.S., (3<sup>rd</sup> Edition) Introduction to Econometrics, McMillan, London

### **Suggested Readings**

4. Gujarati D.N., Econometrics by Example, Palgrave Macmillan
5. J. Woolridge, Introductory Econometrics (5<sup>th</sup> Edition), South-Western Educational Publishing
6. Principles of Econometrics, N. Hatekar, Sage Publishing House
7. Krishna, K.L., Economic Application in India, Oxford University Press, Delhi.

## **235 DB CI – Economics of Industries – I (Elective Discipline)**

### **Objective: To provide the knowledge regarding pattern of industrial Product and industrialization**

1. Meaning, Rational, pattern and impact of industrialization. Factors favouring and Hampering Rapid Industrial Development of India. Relationship between industry and economic development, Industry & sectoral linkages. New Industrial Policy in India, from 1991 to till date. Recent trends in Indian Industrial growth.
2. Concept and organization of a firm, Business classification of firm on the basis of, its activities, Sector, and Ownership structure. (Public, Private, Joint and Cooperative Sectors).
3. Size and Use Base Classification of Indian Industry and their Trends in past 5 years, Control and objectives of the firm, Sellers concentration; Product differentiation; Entry condition.
4. Market and its structure, Extent of market concentration, Industrial combination and its impact on efficiency of the firm and economic power. Theories of Industrial location - Weber and Sargent Florence; Factors affecting location, Industrial Sickness:
5. Size and Growth of the firm; Growth and Profitability of the firm, Constraints of the growth, Indian situation; Product Pricing theories and evidence. Concept & Measurement of Productivity. Productivity Trends in Indian Industry. Industrial competition & Monopoly,
6. Concept and measurement of productivity trend in Indian Industry.

### **Books Recommended:**

1. Cherunilam, F (1994)-Industrial Economics in Indian Perspective 3<sup>rd</sup> Edition, Himalaya Publishing House, Mumbai.
2. Jalan B (1996) -India's Economic Policy, Viking, New Delhi
3. Singh & Sadhu -Industrial Economics, Himalaya Publishing House
4. Naidu K.M. (1999)- Industrialization & Regional Development in India
5. Mamoria & Mamoria -Dynamic of Industrial Relations in India
6. Divine P.J. & R.M. James et.al. (1976) -In Introduction to Industrial Economics George Allen and Unwin Ltd. London.
7. Hay D. & D.J. Morris -Industrial Economics Theory & Evidence, Oxford University Press, New Delhi
8. Ahluwalia, I.J. (1985) Industrial Growth in India, Oxford University Press, New Delhi.
9. Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
10. Chernuliam, F. (1994), Industrial Economics: Indian Perspective (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumabai.
11. Desai, B. (1999), Industrial Economy in India (3<sup>rd</sup> Edition,) Himalaya Publishing House, Mumbai.
12. Divine, P.J. and R.M. Jones Et. Al (1976), An Introduction to Industrial Economics, George Allen and Unwin Ltd., London.
13. Government of India, Economic Survey- Online Available
14. Hay, D. and D.J. Morris (1979), Industrial Economics: theory and evidence, Oxford University Press, New Delhi.
15. Kuchhal, S.C. (1980), Industrial Economy of India (5<sup>th</sup> Edition), Chaitanya Publishing House,

Allahabad.

16. Reserve Bank of India, Report on currency and Finance – Online Available

17. Sing, A and A.N. Sadhu (1988), Industrial Economics, Himalaya Publishing House, Mumbai.

### **236 DB – Labour Problems and Social Welfare (Elective Discipline)**

1. Nature and characteristics of labour Problems.
2. Characteristics of Industrial Labour in India and Migratory nature.
3. Labour power in India.
4. Problems of Absenteeism and Labour Turnover.
5. Classical and Modern Theory of Wage Determination.
6. Concepts of minimum wage, living wage and fair wage.
7. Labour Welfare in India. – Theories of Labour Welfare The policy Theory. The Religious Theory, Philanthropic theory, The trusteeship theory, The placating theory, The Public Relation theory and The function theory.
8. Social Security I India – Need of Social Security, social insurance and social assistance, workers Compensation Act. Maternity Benefit act and Employees state Insurance Scheme.
9. Women Labour in India.
10. Child Labour in India.

#### **Book Recommended:**

1. Lester, R.A. (1964) Economics of Labour (2<sup>nd</sup> Ed.), Macmillan, New York. Pepola, Ghosh and A.N.Sharma (1993) Labour Employment and Industrial Relations in India B.R. Publishing House, New Delhi
2. Datt, G. (1966) , Bargaining Power , Wages and Employment : An Analysis of Agricultural , Labour : Markets in India ; Sage Publishers , New Delhi .
3. Hajela, P.D. (1998) , Labour Restructuring in India : A Critique of the New Economic Policies , Commonwealth Publishers, New Delhi.
4. Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000), The Unorganised Sector: Work Security and Social Protection; Sage Publications, New Delhi
5. Lester, R.A. (1964) , Economics of Labour (2nd Edition), Macmillan, New York.
6. McConnell, C.R. and S.L. Brue (1986) , Contemporary Labour Economics , McGraw –Hill , New York.
7. Papola, T.S.P.P. Ghosh and A.N. Sharma (Eds.) (1993), Labour , Employment and Industrial Relations in India , B.R. Publishing Corporation, New Delhi.
8. Rosenberg M.R. (1988) , Labour Markets in Low Income Countries in Chenery , H.B. and T.N. Srinivasan (Eds.) The Handbook of Development Economics North- Holland, New York.
9. VenkataRatnam, C.S. (2001) , Globalization and Labour – Management Relations : Dynamics of Changes , Sage Publications/Response Books , New Delhi.

### **237 G - Financial Markets (Elective Generic)**

**Objective: The objective of this paper is to understand various financial markets and their operational aspects in India.**

**1. Introduction to Indian Financial System:** Introduction of financial system, Functions of the Financial System, Structure and Characteristics of Financial system , Prerequisites of a Financial System, Players in the Financial System.

**2. Introduction of Financial Markets:** Evolution of the Financial Markets, Segments of Financial Markets, Types of Financial Products, Stages in the Development of Financial Products, Role of Financial markets, Market Efficiency.

**3. Money Market:** Introduction to Money Market, Characteristics and functions, Development of money market in India, Money Market instruments and factors affecting its growth, Role of RBI in the development of money market, Money market and its linkage with Monetary Policy.

**4. Capital Market:** Introduction to Capital Market, Characteristics and functions, Development of Capital market in India, Primary and Secondary Capital markets, Role of SEBI in regulation of the Capital Markets, Reforms in the Capital Markets, Capital Market instruments.

**5. Non –Banking Finance Companies:** Introduction, Registration and Classification & Prudential Norms to be NBFC, Types of Non – Banking Financial Companies, Services Provided by NBFCs, Regulation of NBFC companies, Growth of NBFC in India.

**6. Technology and the Markets:** Technological developments in financial markets; both money and capital markets specially after post reform period, Impact of Technology on the Market, On-Line Trading, Clearing & Settlement system, Technology and payment System, Technology and global market. Role of E- Commerce in the development of Financial Markets.

**7. Foreign Exchange Markets:** Introduction to Foreign Exchange Markets, Structure of Foreign Exchange Markets, Types of transactions and settlement.

#### **Books Recommended:**

1. Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd. New Delhi.
2. Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
3. Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
4. Machiraju, M.R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.
5. Ohlson, J.A. (1987), The Theory of Financial Markets and Institutions, North Holland, Amsterdam.
6. Prasad, K.N. (2001), Development of India's Financial System, Sarup & Sons, New Delhi.
7. Mith, P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.
8. Chandra, P. (1997), Financial Markets, (4th Edition), Tata McGraw Hill, New Delhi.
9. Machiraju, H.R. (1997), International Financial Markets in India, Wheeler Publishing, Allahabad.
10. Fenstermaker, J.V. (1969), Readings in Financial Markets and Institutions, Appleton, New York.
11. Gupta, S.B. (1983), Monetary Economics, S. Chand & Company, New Delhi.
12. Bhatt, R.S. (1996), Unit Trust of India and Mutual Funds: A Study, UTI Institute of Capital Markets, Mumbai.
13. Sahadevan, K.G. and M.T. Thiripalraju (1997), Mutual Funds, Prentice Hall of India, New Delhi.
14. Goss, B.A. and B.S. Yamey (1978), The Economics of Futures Trading, Macmillan, London.
15. Gupta, L.C. (Ed.) (1999), India's Financial Markets and Institutions, Society for Capital Research and Development, Delhi.
16. Crocker, A. (1982), International Money; Issues and Analysis, The English Language Book Society, Nelson, London.

<b>M.A (Economics) IV SEMESTER January 2017</b>		
Sub.Code	Subject Name	credits
241C	India's Foreign Trade & International Institution ( Core)	3
242C	Indian Economic Policy ( Core)	3
243D	Economics of Social Sector & Gender ( Elective Discipline)	3
244DA	Mathematical Economics- II ( Elective Discipline)	3
245DA	Econometrics- II ( Elective Discipline)	3
244DB	Economics of Industries- II ( Elective Discipline)	3
245DB	Industrial Relation and India's Legislation-II ( Elective Discipline)	3
246P	Dissertation + Viva	4
24V	Comprehensive Viva Voce	4
	<b>Total credits</b>	<b>23</b>

#### **Fourth Semester**

#### **241C – India's foreign trade and International Institutions (Core)**

**Objective: India's foreign trade is increasing day by day so that there is a need to know the system of international trade and the role of the international institution in the economic development.**

1. Foreign Trade and Economic Development. Meaning and Components of Balance of Payments, Equilibrium and disequilibrium of Balance of Payments. Factors causing disequilibrium balance of payments
2. Adjustment mechanisms of Balance of Payments Under Gold Standards, Under flexible exchange rates (price effect), Under elasticity approach Marshall Lerner condition, Under capital Movements and direct control for adjustment. Foreign Trade Multiplier and determination of Income.
3. Concept of Foreign exchange rate, Determination of Equilibrium exchange rate. Theories of Exchange rate determination the purchasing power parity theory and the Balance of Payment theory. Factor causing changes in exchange rates. Relative's merits and demerits of fixed and flexible exchange rates, concepts of spot and forward exchange rates, convertibility of currency.
4. Exchange control Meaning, features, objectives and methods of exchange control. Devaluation - Devaluation of Indian Rupee and its impact on out economy. Free Trade versus Protection cases for and against.
5. Foreign Direct Investment FII Multinational corporation Global margin equitation and Consequence. Current issues of International Trade
6. World Trade Organization -Functions, structure objectives and working of WTO India and WTO Trade Blocks EU, NAFTA, ASEAN, International Monetary Fund Origin, objectives, functions and working of the fund, India & IMF .World Bank Functions, working, India and the World Bank. Foreign Trade and Balance of payment iQ India, Recent changes in the direction and composition of trade, Major problems of Indian export sector.

#### **Books Recommended:**

6. डॉ. के.डी. स्वामी – अन्तर्राष्ट्रीय अर्थशास्त्र, सांइटिफीक पब्लि. 1990–95
7. Thomas A. Paugel- International Economics, Pub. 2015
8. Dominlok, Salventre- International Economic, Willy Pub. 2010
9. Dr. D.M. Mithani- Internation Economic, Himalaya Pub. 2004

10. BO Sodersten & Geoffroy Recd- Introduction Economic  
McMillion Pub. 2000
- 16 D.N. Dwivedi- International Finance, Vikas Publication 2013
- 17 झिंगन एम.एल. – अन्तर्राष्ट्रीय अर्थशास्त्र, वृन्दा. पब्लि. 2015
- 18 अग्रवाल/बरला – अन्तर्राष्ट्रीय अर्थशास्त्र,, लक्ष्मीनारायण अग्रवाल 1998
- 19 डॉ. वी.सी. सिन्हा – अन्तर्राष्ट्रीय अर्थशास्त्र, नेशनल पब्लि. हाऊस 1990?
- 20 Dr. P. Subba Rao- International Business, Himalaya Pub.2001
- 21 Cherwnilam Francis- International Economics  
Tata Megrawsai 1995
- 22 Ghosh Peu – International Relations, PHI Pub. 2012
- 23 Jhingam M.L. International Economics, Vrinda Pub. 2014
- 24 Carbug Robert J - International Economics, Carbug pub. 2008
- 25 Verma/ Rana - International Economics,  
Jalandhar, Sohanlal, Chand. Co.1997

### **242C –Indian Economic Policy (Core)**

#### **I. Framework of Indian Economy**

- 1: Economic Policy: An Introduction
- 2: Trend and Structure of National Income
- 3: Demographic Features and Indicators of Development
- 4: Poverty and Inequality: Policy Implications
- 5: Employment and Unemployment: Policy Implications

#### **II. Development Strategies In India**

##### **1. NITI Aayog – A critical Appraisal**

- 2:Economic Reforms in India
- 3: Critique of Economic Reforms
4. Special Programme – SEZ's, Policy related to poverty removal – MANREGA, NRLM, Jan Dhan yojna, women empowerment and welfare yojna.

#### **III. Sectoral Performance –I**

- 1: Agricultural Growth, Productivity Trends and Crop Patterns
- 2: Issues and Concerns in Indian Agriculture
- 3: Industrial Sector in Pre-reform Period
- 4: Industrial Sector in Post-reform Period with Emphasis on Small-Scale Sector

#### **IV. Sectoral Performance - II**

- 1: Infrastructure.
- 2: Indian Financial System: Money Market and Monetary Policy
- 3: Capital Marketing India and Working of SEBI

#### **V. Economic Planning in India**

- 1: Rational features and objective. The strategy of panning
- 2: Resource relocation in Indian plans: Eleventh five year plan.

### **Books Recommended:**

1. Uma Kapila – Indian Economy Since Independent Academic New Delhi, Pub. 2006
2. दत्त एवं सुन्दरम – भारतीय अर्थशास्त्र, एस.चन्द्र एंड संस, 2008
3. Ruffar Datt, KPM Sundaram – Indian Economy, एस.चन्द्र एंड संस, 2002
4. मिश्र एवं पुरी – भारतीय अर्थशास्त्र
5. Mishra V.K. & Puri S.K.- Indian Economy , Himalaya Pub. 2014
6. Datt Gaurav, Ashwini Mahajan, Indian Economy, S.Chand Pub. 2008
7. गौरव दत्त, अश्विन महाजन – भारतीय अर्थव्यवस्था, एस.चन्द्र एंड संस, 2008
8. P.K.Dhar- Indian Economy, Palyani Pub. 2001
9. B.N. Singh, M.P. SHrivastava- Indian Economy Anmol Pub. 2000
10. Bimal Jalan- The Indian Economy, Pengium Book, India Pub. 1994
11. V.K.R.V.Rao- Great Indian Economics, Deep & Deep Pub. 2004
12. Romani Nair, N. Irvathi- Indian Economics, Interline Pub. 2003
13. A.N.Agrawal- Indian Economy, Vishwa Prakashan 2005
14. एन. अग्रवाल– भारतीय अर्थशास्त्र, विश्व प्रकाशन, 2005

### **243 D – Economics of Social Sector and Gender (Elective Discipline)**

**Objective: To provide the knowledge regarding the role of social sector and gender in economic development.**

1. Education as an instrument for economic growth, Economic of Education, Cost of Education. Expenditure of education, Direct & indirect benefit: Education Planning and economic growth manpower planning, educational finance.
2. Economics of Health Essentials of Health Economics, Determinant Factor of Health, Externalities and Health care , Health care and Insurance Problems of Public Health in low Income countries , Problems reforms and lessons for India Infrastructure of health care system in India.
3. Gender Economics- Strategy for Women Development in India Role of N.G.O in Women Development in India. Development index (Human Development index. Gender Development index and Gender Empowerment measure (GEM) Women in Media. Factor Affecting Decision making by women . Gender Discrimination, Gender Bias.
4. Demographic Aspects - Demography of female population: Age structure, mortality rates, and sex ratio — Causes of declining sex ratios and fertility rates in LDCs and particularly India — Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and inwork participation rate.
5. Women in Decision Making- Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.

### **Books Recommended :**

1. Boserup E. (1970), Women's Role in Economic Development, George Allen and Unwin, London.
2. Desai, N. and M.K. Raj (Eds.) (1979), Women and Society in India, Research Center for Women Studies, SNDT University, Bombay
3. Government of India (1974), Towards Equality – Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
4. Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development, Oxford University Press, New Delhi.
5. Seth, M. (2000), Women and Development: The Indian Experience, Sage Publications, New Delhi.
6. Srinivasan K. and A. Shariff (1998), India: Towards Population and Development Goals, Oxford University Press, New Delhi.
7. Venkateswaran S. (1995), Environment, Development and the Gender Gap, Sage Publications, New Delhi.
8. Wazir, R. (2000), The Gender Gap in Basic Education: NGOs as Change Agents, Sage Publications, New Delhi.

### **244 DA – Mathematical Economics – II (Elective Discipline)**

**Objective: To sharpen the analytical ability and develop understanding of quantitative models.**

1. Simple Integration, Definite Integral and its application in Economics.
2. Differential equations
3. Simple difference equations and their application in Economics. Application in Cobweb Model, Harod- Domar Model, Dynamic multiplier.
4. Meaning of Input output model; its assumptions; application of Input-output model.
5. Linear Programming- General Formulation of Maximization and Minimization problem. Graphical and Simplex method and interpretation of results.
6. Basic concepts of Game Theory; Classification and description of Games, types of solution to Two Person Zero Sum Game.

#### **Books Recommended:**

1. A.C. Chaing: Fundamental Methods of Mathematical Economics (II Ed.)
2. Mehta and Madnani: Mathematics for Economists
3. Allen, R.G.D. : Mathematical Analysis for Economics Analysis
4. G.S.Moonga: Mathematics and Statistics for Economists- Vikas Publications
5. J. M. Henderson and R. E. Quandt, Microeconomic Theory: A Mathematical Treatment, New York: McGraw-Hill, 1980.
6. An Introduction to Mathematical Economics, Badlani, Bradfield, Turner, Cengage learning
7. Mathematics for Economists: An elementary survey (2<sup>nd</sup> edition), Taro Yamane, eastern Economy Edition

### **245DA - Econometrics – II (Elective Discipline)**

**Objective: To develop the mathematical, statistical and analytical approach in the economics with the help of econometrics.**

1. Matrix Approach to Linear Regression Model. Assumptions, OLS Estimation and their properties. Interpretation of Results.
2. Comparison of ANNOVA and Regression Analysis; F-Test and T-Test.
3. Autoregressive Distributed Lag Models- Adaptive Expectation Model, Partial Adjustment Model, Estimation of Autoregressive Model, Detecting auto correlation in Autoregressive Model. The Almon Approach to Distributed Lag Model and Principal Component Analysis.

4. Basic tests used in Econometrics- Chow Test, Grangers test of causality, Breusch-Godfrey test, Dickey-Fuller test.
5. Application of LRM for estimation of Growth rate, demand function, production function.
6. Mixed Estimation Methods, Restricted Least Squares (RLS).
7. The Maximum likelihood methods.
8. Panel Data Regression Models- Pooled OLS method, Fixed effect LSDV model, Random Effect model.
8. Basics of time series analysis; Random walk theory and introduction to ARIMA and its application in forecasting.

**Books Recommended:**

1. Gujarati, D.N. Basic Econometrics (5<sup>th</sup> Edition) MC Graw Hill New Delhi.
2. Koutsoyiannis, A, Theory of Econometrics (2<sup>nd</sup> Edition), The Macmillan Press Ltd. London
3. Maddala, G.S, (3<sup>rd</sup> Edition) Introduction to Econometrics, McMillan, London

**Suggested Readings**

4. Gujarati D.N., Econometrics by Example, Palgrave Macmillan
5. J. Woolridge, Introductory Econometrics (5<sup>th</sup> Edition), South-Western Educational Publishing
6. Principles of Econometrics, N. Hatekar, Sage Publishing House
7. Krishna, K.L., Economic Application in India, Oxford University Press, Delhi.

**244DB GI - Industrial Economics II (Elective Discipline)**

**Objective: To introduce about the different industries and their policies and problems.**

1. Investment Expenditure, Methods of Evaluating Investment Expenditure, Mergers and Acquisition (M & As) and Diversification. Global Competitiveness of Indian Industries.
2. Growth and current problems of selected large scale industries in India Iron & steel, Cotton textiles, Jute, Cement, Sugar and engineering goods. (Organised in Manufacturing Sector), Development of Small Scale and Cottage Industries in India.
3. Sources of Industrial finance Equity (owned), debt (external) Role & growth of major funding agencies IOBI, IFCI, SFDs, SIDS and Commercial banks etc., in the Indian Industrial development. Role of FDIs in Industrial development.
4. Regional Distribution of Industries and Regional disparities in Industrial Growth along with Special Reference to Industrial Development of Madhya Pradesh.
5. Man Power Planning

**Books Recommended:**

1. Cherunilam, F (1994)-Industrial Economics in Indian Perspective 3<sup>rd</sup> Edition, Himalaya Publishing House, Mumbai.
2. Jalan B (1996) -India's Economic Policy, Viking, New Delhi
3. Singh & Sadhu -Industrial Economics, Himalaya Publishing House
4. Naidu K.M. (1999)- Industrialization & Regional Development in India
5. Mamoria & Mamoria -Dynamic of Industrial Relations in India
6. Divine P.J. & R.M. James et.al. (1976) -In Introduction to Industrial Economics George Allen and Unwin Ltd. London.
7. Hay D. & D.J. Morris -Industrial Economics Theory & Evidence, Oxford University Press, New Delhi
8. Ahluwalia, I.J. (1985) Industrial Growth in India, Oxford University Press, New Delhi.
9. Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
10. Chernuliam, F. (1994), Industrial Economics: Indian Perspective (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumbai.
11. Desai, B. (1999), Industrial Economy in India (3<sup>rd</sup> Edition,) Himalaya Publishing House, Mumbai.
12. Divine, P.J. and R.M. Jones Et. Al (1976), An Introduction to Industrial Economics, George Allen and



Unwin Ltd., London.

13. Government of India, Economic Survey (Annual)

14. Hay, D. and D.J. Morris (1979), Industrial Economics: theory and evidence, Oxford University Press, New Delhi.

15. Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.

16. Reserve Bank of India, Report on currency and Finance (Annual)

17. Sing, A and A.N. Sadhu (1988), Industrial Economics, Himalaya Publishing House, Mumbai.

### **245DB - Industrial Relations and Labour Legislation - II (Elective Discipline)**

**Objective: To introduce the workers participation in the industrial management and their legislation.**

1. Industrial Relation and Human Relation.
2. Industrial Disputes.
3. Prevention and Settlement of Industrial Disputes.
4. Workers participation in Management.
5. Profit Sharing and Co-partnership.
6. Personnel Management.
7. National Wage Policy
8. Man Power Planning.
9. Labour Legislation in India.
10. Second National Commission on Labour.

#### **Book Recommended:**

1. Lester, R.A. (1964) Economics of Labour (2<sup>nd</sup> Ed.), Macmillan, New York. Pepola, Ghosh and A.N. Sharma (1993) Labour Employment and Industrial Relations in India B.R. Publishing House, New Delhi
2. Datt, G. (1966) , Bargaining Power , Wages and Employment : An Analysis of Agricultural , Labour : Markets in India ; Sage Publishers , New Delhi .
3. Hajela, P.D. (1998) , Labour Restructuring in India : A Critique of the New Economic Policies , Commonwealth Publishers, New Delhi.
4. Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000), The Unorganised Sector : Work Security and Social Protection ; Sage Publications, New Delhi
5. Lester, R.A. (1964) , Economics of Labour (2nd Edition), Macmillan, New York.
6. McConnell, C.R. And S.L. Brue (1986) , Contemporary Labour Economics , McGraw –Hill , New York.
7. Papola , T.S.P.P. Ghosh and A.N. Sharma (Eds.) (1993), Labour , Employment and Industrial Relations in India , B.R. Publishing Corporation , New Delhi.
8. Rosenberg M.R. (1988) , Labour Markets in Low Income Countries in Chenery , H.B. and T.N. Srinivasan (Eds.) The Handbook of Development Economics North- Holland, New York.
9. Venkata Ratnam, C.S. (2001) , Globalization and Labour – Management Relations : Dynamics of Changes , Sage Publications/Response Books , New Delhi.

## **PROJECT WORK**

The students will be required to take Project work compulsorily in second year. The project work should be based on field work, working of any economic organization like cooperatives, local markets, panchayats, nagarपालikas, mandies, banks etc. The students should be advised to explore the job opportunities with NGOs and other Govt. and semi Govt, organizations. The evaluation of this project work will be done at two stages.

**Stage-I** -: Preparation and presentation of Synopsis before a committee of experts. This will be evaluated at the end of third semester.

**Stage-II** -: Final submission of the Project Report, which will be evaluated at the end of fourth semester.

### **246P- Dissertation + Viva**

**Objective: To generate interest & understanding to analyze the facts and figure of the socio-economic issues.**

Student will have to write a case study under the guidance of a faculty member, on the allotted subject/topic. It should cover basic concept of the research and issues of current economic problems of the country. A Board of Examiners will evaluate the Case study at the end of Semester. The student will be required to make presentation through Power Point Presentation.

Task On or before

Submission of topic to the course advisor

September 30

Submission of Synopsis

October 31

Submission of Case Study (MRP)

Second Week of April

M RP Viva      Second w