

આથી ગુજરાત યુનિવર્સિટી સાથે સંલગ્ન આર્ટ્સ વિદ્યાશાખાની તમામ કોલેજોના આચાર્યશ્રીઓને તથા અનુસ્નાતક કેન્દ્રોના વિભાગીય વડાશ્રીઓને જણાવવાનું કે અર્થશાસ્ત્ર વિષયના બોર્ડ ઓફ સ્ટડીઝના સભ્યશ્રીઓ દ્વારા નીચે મુજબનો અભ્યાસક્રમ ફેરફાર કરવામાં આવે છે.

- MA, M. PHILનો અર્થશાસ્ત્ર વિષયનો અભ્યાસક્રમ ચાલુ શૈક્ષણિક વર્ષ (જુન-૨૦૧૭)થી UGCની માર્ગદર્શિકા અનુસાર અભ્યાસક્રમો ને ધ્યાનમાં રાખીને તૈયાર કરવામાં આવ્યો છે.
- MA અર્થશાસ્ત્ર વિષયનો અભ્યાસક્રમ ચાલુ શૈક્ષણિક વર્ષથી જુન૨૦૧૭ થી સેમેસ્ટર એકમાં અને નવેમ્બર ૨૦૧૭થી સેમેસ્ટર બેમાં યુનિવર્સિટીના અનુસ્નાતક ભવનો અને તમામ ઠોડાચેલી કોલેજોના અનુસ્નાતક કેન્દ્રોમાં લાગુ થશે.
- MA અર્થશાસ્ત્રના તમામ પપેર્સની સ્થાનિક અને યુનિવર્સિટી પરીક્ષાના પ્રશ્નપત્રનું માળખું એક સમાન રહેશે. જે અનુસાર પ્રથમ ચાર પ્રશ્નોમાં “અથવા” સહિતના પ્રશ્નો ૧૪ માર્ક્સના રહેશે. જેમાં ૧૪ માર્ક્સનો એક લાંબો પ્રશ્ન અથવા ૦૭-૦૭ માર્ક્સના બે પ્રશ્નો પૂછવાના રહેશે, તેમજ પ્રશ્ન-૫ MCQનો રહેશે.

નોંધ: નવો અભ્યાસક્રમ યુનિવર્સિટીની વેબ-સાઈટ પર મુકેલ છે, જે ચકાસી લેવા વિનંતી છે, :<http://www.gujaratuniversity.ac.in/web/custom/student/syllabus>  
સાદર તમામને જાણસારું.....

1. યુનિવર્સિટી સંલગ્ન આર્ટ્સ અને કોમેર્સ વિદ્યાશાખાની તમામ કોલેજોના અચાર્યશ્રીઓ
2. પરીક્ષા નિયામકશ્રી, ગુજરાત યુનિવર્સિટી, અમદાવાદ
3. પરીક્ષા વિભાગ, ગુજરાત યુનિવર્સિટી, અમદાવાદ
4. પી. જી. વિભાગ, ગુજરાત યુનિવર્સિટી, અમદાવાદ
5. પ્રો. હીનાબેન સિદ્ધુ, કા. અધ્યક્ષ, અર્થશાસ્ત્ર વિભાગ, ગુજરાત યુનિવર્સિટી, અમદાવાદ

## **SEMESTER:-01 (EFFECTIVE FROM 2017-2018)**

### **ECO-401- MICROECONOMICS-I**

This paper has the focus on economic behavior of an individual and the firm, which is governed by the principles of demand, consumer surplus and consumer behavior under various market situations. The contribution of various economists to the readings of welfare economics will form a part of the teachings of this subject. The aim of this subject is to develop specific skills in the student that are applicable in different fields such as administration, marketing and research, etc.

#### **OUTCOME**

This paper teaches about the behavior of an individual touching every aspect of day-to-day transactions. The subject prompts the students to do mind boggling exercises while observing his own vis-à-vis others behavior at home as well at the market places. An interest in the subject and regularity in observing the consumer behavior leads the students to excel in marketing and consumer research.

#### **UNIT-1**

Micro economics - nature, scope, importance & limitations; Methodology of economics, Economics – static and dynamic, general and partial equilibrium; Difference between Macro and Micro economics, Analytical Techniques of Economic Analysis : Determination of Equilibrium and Optimisation.

#### **UNIT-2**

Demand Theory: Cardinal (utility) and Ordinal (Indifference curve) approaches, consumer equilibrium, price, income and substitution effects, Giffen paradox, derivation of demand curve with the help of Indifference curves. Marshallian cardinal utility vs. indifference curve analysis; Revealed preference theory of demand. The Neumann-Morgenstern Method.

#### **UNIT-3**

Consumer surplus-meaning, Marshall's concept and Hicks's four concepts of consumer surplus. Elasticity of demand - meaning, types, importance and applications, Methods of measuring elasticity of Demand.

#### **UNIT-4**

Welfare Economics: Pigou's theory of welfare economics. Conditions of Pareto Optimality. New welfare economics-Kaldor-Hicks welfare criteria; Concept of grand utility possibility frontier.

Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London  
Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.

Layard, P.R.G. and A. W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.

Sen, A. (1999), Microeconomics Theory and Applications, Oxford University Press, New Delhi.

Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.

Varian, H. (2000), Microeconomic Analysis, W. W. Norton, New York

**Additional Reading List: UNIT-1**

Baumol, W. J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

**UNIT-2**

Baumol, W. J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

Green, H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.

Henderson, J. M. and R. E. Quandt (1980), Microeconomic Theory : A Mathematical Approach, McGraw Hill, New Delhi.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

**UNIT-3**

Baumol, W. J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

Green, H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.

Henderson, J. M. and R. E. Quandt (1980), Microeconomic Theory : A Mathematical Approach, McGraw Hill, New Delhi.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

**UNIT-4**

Broadway, R. W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.

Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

Graff, J. De V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.

Green, H. and V. Walsh (1975), Classical and Neo-classical Theories of General Equilibrium, Oxford University Press, London.

Hansen, B. (1970), A Survey of General Equilibrium Systems, McGraw Hill, New York.

Henderson, J. M. and R. E. Quandt (1980), Microeconomic Theory : A Mathematical Approach. McGraw Hill, New Delhi.

Mishan, E. J. (1969), Welfare Economics : An Assessment, North Holland, Amsterdam.

Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.

Weintrub, E. R. (1974), General Equilibrium Theory, Macmillan, London.

## ECO-402-MACROECONOMIC ANALYSIS-I

### OBJECTIVE

Macroeconomics or aggregative economic analysis establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics now is not only a scientific method of analysis; but also a body of empirical economic knowledge.

### OUTCOME

The paper entitled Macro Economic Analysis-I equips the students at the postgraduate level to understand economic facts and latest theoretical developments for empirical analysis.

#### Unit - 1

Determinants of income and employment generation: Classical, Keynes and modern approach on consumption and investment functions.

#### UNIT - 2

Neo-classical and Keynesian Views on Interest; The IS-LM Model; Extension of IS-LM Model with Government Sector; Effectiveness of Monetary and Fiscal Policies.

#### UNIT – 3

Supply Side Economics, Samuelson and Solow the Natural Rate of Unemployment Hypothesis. Philips Curve.

#### UNIT – 4

Economic Stability and Policies: Its effects on Poverty, Inequality and Unemployment.

#### Basic Reading List :

- Ackley, G. (1978), *Macroeconomics • Theory and Policy*, Macmillan, New York.  
Branson, W. A. (1989), *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.  
Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.  
Hall, R. E. and J. B. Taylor (1986), *Macroeconomics*, W. W., Norton, New York.  
Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.  
Romer, D. L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.  
Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.  
Surry, M. J. C. (Ed.), *Macroeconomic Themes*, Oxford University Press, Oxford.  
Errol D'souza, (2008), *Macroeconomics*, Pearson Education, India.  
Andrew B. Abel, Ben S. Bernanke & Dean Croushore (2011), *Macroeconomics*, Pearson, India, Seventh Edition, Global Edition.

## **ECO403 – MANAGERIAL ECONOMICS - I**

### **OBJECTIVE**

The focus of Managerial economics is on preparing the students with fundamental knowledge in the areas of business economics. The teaching aims at the explanation of basic concepts of managerial economics, imparting understanding about important statistical tools used in the estimation of demand, and price, cost and budget analysis which are considered to be critical in every business.

### **OUTCOME**

The labour markets are becoming more and more competitive in India. This paper prepares the students to gain basic knowledge required for working efficiently in the business environment. Various concepts commonly used in management, and the application of simple tools in demand and price analysis in each business is of great help to build professional competency in the management.

### **UNIT 1**

Meaning, nature, characteristics and significance of managerial economics. Scope, role and responsibility of managerial economics. Fundamental concepts, models and methods; Managerial and behavioral theories of firm.

### **UNIT 2**

Use of Optimization Techniques in the theory of firm, differential calculus; Rules of derivation, optimization using calculus. Linear Programming-basic assumptions, constrained profit maximization & constrained cost minimization using graphical method.

### **UNIT 3**

Purpose of forecasting demand, steps involved in forecasting, determinants of demand forecasting. Methods of demand forecasting for established products and for new products.

### **UNIT 4**

Pricing Policies, Practices & Strategies: Some popular pricing practices; Pricing in large enterprises; Pricing approach in small business units.

### **Books Recommended**

- Dominic Salvatore, Managerial Economics, Thomson-South Western, 2001.  
Peterson C.H. and Lewis WC, Managerial Economics, Pearson, 2012.  
Dholkia R.H. and Oza A.N., 'Microeconomics for managers', Oxford University Press, 1996.  
Rikie W. D. and J. N. Crook, 'Managerial Economics', Heritage Publishers, 1988.  
Dutt R. and Sundaram KPM, 'Indian Economy', S Chand Group, New Delhi.  
Mehta P.L., Managerial Economics, Sultan Chand & Sons, New Delhi

## **ECO-404 INTERNATIONAL ECONOMICS – I**

This course is designed to impart thorough understanding about the broad principles and theories, which tend to govern the flow of trade in goods, services and capital at the global level. Besides, preparing the students about the relevance and limitations of these principles, the contents of the paper, spread over different subjects, lay stress on the theory and nature of the subject, which, in turn, will greatly help them to examine the impact of the trade policies. This subject will impart learning of various theories of international trade, economics of international trade, theories and practice of trade regulations and restrictions the in international trade including trade cartels and market blockade.

### **OUTCOME**

The aim of this subject is to provide an understanding of the economics of international trade from a microeconomic perspective. The study of international economics will prepare the students to demonstrate knowledge and understanding of various players in the global markets and also the intricacies of international trade.

### **UNIT 1**

Classical theories of comparative advantage-Adam Smith, Ricardo; Neoclassical theory – Haberler's opportunity cost theory. Modern theory - Heckscher-Ohlin theorem, Leontief paradox; Factor price equalization theorem–Stolper-Samuelson, Rybczynski. Alternative theories of International Trade.

### **UNIT 2**

Terms of Trade – Types, factors affecting TOT. Mill's theory of reciprocal demand; Marshall's theory of offer curves. Secular deterioration of TOT – Singer, Prebisch theory, immiserising growth.

### **UNIT 3**

Free trade versus protection, economic arguments for protection. Tariffs - types of tariffs, effects of tariffs, partial and general equilibrium; Optimum tariff and protective tariff; Import quota – types, effects.

### **UNIT 4**

Theory of custom unions – trade creation and trade diversion, production and consumption effects, other dynamic effects of customs unions. Economic progress under SAARC/SAPTA, NAFTA, ASEAN, EU, EURO dollar market. International monetary system; International trade and financial institutions – GATT, WTO, IMF, World Bank, Asian Development Bank.

### **Basic Reading List:**

- Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, University Press, Massachusetts.
- Carbough, R. J. (1999), International Economics, International Thompson Publishing, New York.
- Chacholiades, M. (1990), International Trade • Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M. S. (2000), International Economics • Study, Guide and Work Book, (5th Edition), Routledge Publishers, London.
- Dunn, R. M. and J. H. Mutti (2000), International Economics, Routledge, London.
- Kenen, P. B. (1994), The International Economy, Cambridge University Press, London.
- Kindleberger, C. P. (1973), International Economics, R. D. Irwin, Homewood.
- King, P. G. (1995), International Economics and International Economics Policy : A

Salvatore, D.(1997), International Economics, Prentice Hall, Upper Saddle River, N. J., New York.  
Soderston, Bo (1991), International Economics, The Macmillan Press Ltd.,London.

**Additional Reading List : UNIT 1**

Bhagwati, J. (Ed.) (1981), International Trade : Selected Readings, Cambridge University Press, Mass.

Corden, W. M. (1965), Recent Developments in the Theory of International Trade, Princeton University Press, Princeton.

Greenway, D. (1983), International Trade Policy, Macmillan Publishers Ltd., London.

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Barrow, R. J. (1979), Macro Economic, 4th Edition, John wiley, New York.

Clement, M. O., R. L. Pffister and K. J. Rothwell (1969), Theoretical Issues in International Economics Cosntable Publication, London.

Corden,W.M.(1974),Trade Policy and Economic Welfare, Clarendon Press, Oxford.

**UNIT 2**

Goldstein, M. (1998), The Asian Financial Crisis :• Causes, Cure and Systematic Implication,Institute for International Economics, Washington, D.C.

Jackson, J. (1989), The World Trading System, Cambridge University Press, Mass.

**UNIT 3**

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Pomfrert, R. (1988), Unequal Trade : The Economics of Discriminatory International Trade Policies, Black well Publishers, Oxford.

**UNIT 4**

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Brahmananda, P. R. (1982), The IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.

Grable, J. O. (1996), International Financial Markets, Prentice Hall, Englewood Cliffs, New York.

Kenen, P. B. (1995), Economic and Monetary Union in Europe, Cambridge University Press, U.K.

Kindleberger, C. P. (1996), A History of Financial Crisis : Manias, Panics and Crashes, (3<sup>rd</sup> Edition), John Wiley and Sons, New York.

Manmohan Singh (1964), India's Export Trends and the Prospects for Self-sustained Growth, Oxford University Press, New Delhi.

Mishkin, S. F. (1998), The Economic of Money, Banking and Financial Markets, (5th Edition),Harper Colins Publishers, New York.

Mundell, R. (1968), International Economic, The Macmillan Company Ltd., New York.

Nayyar, D. (1976), India's Exports and Export Policies in the 1960s, Cabbidge University Press.

Panchmukhi, V. R. (1978), Trade Policies of India — A Quantitative Analysis, Concept Publishing Company, New Delhi.

Panchmukhi, V. R., K. M. Raipuria and R. Tandon (1987), Money and Finance in World Economic Order, (RIS), Indus Publishing Co., Delhi.

Pomfrert, R. (1996), International Trade : An Introduction to Theory and Policy, Basil Blackwell, Oxford.

Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.

Tew, B. (1985), The Evaluation of the International Monetary System : 1945-1985, Hutchinson.

Whalley, John (1985), Trade Liberalization Among Major Trading Areas, Cambridge University Press, Mass.

## **ECO405-QUANTITATIVE TECHNIQUES AND RESEARCH METHODS IN ECONOMICS I**

### **OBJECTIVE**

The main objective of this paper is to train the students to use the techniques of mathematical and statistical analysis, which are commonly applied, to understand and analyze economic problems. The emphasis of this paper is on understanding economic concepts with the help of mathematical and statistical methods rather than learning mathematics and statistics itself.

### **OUTCOME**

After studying this paper a student will be initiated into various economic concepts which are amenable to mathematical and statistical treatment. The paper also deals with simple tools and techniques which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

### **UNIT 1**

Derivative- Rules of differentiation and partial differentiation and its applications. Integration-rules of integration. Its application in Economics-consumer's surplus.

### **UNIT 2**

Determinants and its basic properties; Solution of simultaneous equations through Cramer's rule. Concept of matrix—their types, simple operations on matrices, matrix inversion. Concept of vector—its properties. Matrices and vectors and its applications.

### **UNIT:3**

Measures of central tendency. Measures of Dispersion and Skewness, Kurtosis.

### **UNIT 4**

Population & sample Sampling and Sampling Distributions : Census v/s sampling, probability sampling v/s non-probability sampling-simple random sampling—Types of sampling—Sampling and non-sampling errors.

### **Basic Reading List :**

- Allen, R. G. D. (1974), *Mathematical Analysis for Economists*; Macmillan Press and ELBS, London.
- Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
- Gupta, S. C. (1993), *Fundamental of Applied Statistics*, S. Chand & Sons, New Delhi



## **ECO406 – ENVIRONMENTAL ECONOMICS - I**

### **OBJECTIVE**

Environmental economics is considered as an important course for students studying industrial economics and management. Global warning about climatic change and the focus of the United Nations on the adoption and implementation of sustainable development policies in the member countries has carved a niche for the environment economics. This paper is designed to teach the students about various environmental issues, environmental protection policy of the Government of India and the importance of environmental protection for the attainment of sustainable development.

### **OUTCOME**

The environment economics has been considered an important branch of the social sciences in the developed as well as developing countries. After successful completion of studies, the students possessing adequate knowledge about environmental issues will play an important role in the implementation of various environment related programs.

### **UNIT 1**

Elementary ecology- functions of ecosystems, relationship between economy - eco-system and first two laws of Thermodynamics. Economic development and environment - environmental Kuznets' curve. Meaning, nature and scope of environmental economics. Conventional national accounting system and natural resource accounting system.

### **UNIT 2**

Market failures in environmental goods, externalities, common property resources, non-exclusion, public goods and non-rivalry, non-convexities, asymmetric information.

### **UNIT 3**

Instruments of environmental policy, liability rules, command and control (standards) policy, market based instruments-price rationing (charges and subsidies), quantitative rationing concept and basic theory of tradable pollution permits. Environmental policy in India.

### **UNIT 4**

Historical evolution of sustainable development, definition and concept of sustainable development. Growth verses zero growth; limits to growth verses sustainable development debates. Models of sustainable development.

### **Books Recommended**

Asian Development Bank (1996) : Economic Evaluation of Environmental Impact : A Workbook.

Baumol William and Wallace Oates (1975) The Theory of Environment Policy, Prentice Hall, New Jersey.

Centre for Science and environment (1999, 1997, 1991, 1984 and 1982) : The state of India's environment, CSE, New Delhi.

Collard David, Pearce David, Ulph David (eds.) (1988) : Economics, Growth and Sustainable Environment, St. Martin's Press, New York.

Cropper M. L. and Oates W. E. (1992) : Environmental Economics : A survey, Journal of Economic Literature.

Dasgupta Parth and Karl - Goram Malor (eds.) (1997) : The Environment and Emerging Development Issues, Oxford University Press, New York.

Hanley Nick, Shogren J. F. and White Ben (1997), Environmental Economics in Theory and Practice, Macmillan, New Delhi.

- Kolstad Charles (2000) : Environmental Economics, Oxford University Press, New York.
- Mehta Shekhar, Mundel Sudipto and Sarkar U. (1997) : Controlling Pollution, Sage, New Delhi.
- Markandya A. and Richardson J. (eds.) (1992) : Environmental Economics : A Reader, St. Martin's Press, New York.
- Oates W. E. (1992) : The Economics of the Environment, Cambridge University Press, Cambridge.
- Opschoor J. (Hans), B. Button Kenneth and Peter Nijamp (eds.) (1999) : Environmental Economics and Development, Edward Elgar, U.K.
- Preeman Hyrick A. (1993) : The Measurement of Environment and Resource Values, Resources for Future, Washington D.C.
- Seitz John L. (1995) : Global Issues : An Introduction, Blackwell, Oxford, U.K.
- Seminer (Issue No. 486 : February 2000) : A symposium on Environment : Myth and Reality.
- Siebert H. (1998) : Economics of Environment : Theory and Policy, (5th revised edition), Springer, New York.
- Tietenberg Thomas, Kenneth Button and Peter Nijkamp (eds.) (1999) : Environmental Instruments and Institutions, Edward Elgar, U.K.
- Turner Kerry R., Button Kenneth and Peter Nijkamp (eds.) (1999) : Ecosystems and Nature : Economics, Science and Policy, Edward Elgar, U.K.
- World Bank (1992) : World Development Report 1992 : Development and the Environment, Oxford University Press, New York.
- World Watch Institute (1992) : State of the World, Horizon India Books, New Delhi.

# SEMESTER-II (EFFECTIVE FROM 2017-2018)

## ECO407–MICROECONOMICS–II

### OBJECTIVE

The focus of this paper is on imparting rigorous and comprehensive understanding of the behaviour a firm. Teaching of different theories of production, costs, price determination in different market situations is aimed at triggering the analytical skills in the budding economists.

### OUTCOME

The strength of microeconomics comes from the simplicity of its underlying structure and its close touch with the real world. The students learn how different players make choices when different forces like scarcity, surplus and regulations govern the market. By understanding the supply and demand theories, the students gain in-depth knowledge about the interaction of various market forces. The Supply and demand refers to goods and services and the concept is the hallmark of the business. A thorough knowledge of this subject would help the students to contribute considerably in the planning and research activities in the industry and academic institutions.

### UNIT 1

Production function – types, factor elasticity of substitution, law of variable proportions, returns to scale, Producer's equilibrium, choice of optimal combination of inputs; Economies of scale - internal economies and diseconomies, external economies and diseconomies. Cost concepts - accounting and economic costs, private cost and social cost, opportunity cost, traditional and modern theories of cost.

### UNIT 2

Perfect competition - supply curve of firm and industry. Monopoly - price and output determination; Comparison between monopoly equilibrium and perfect competition equilibrium; Discriminating monopoly – price discrimination, equilibrium under discriminating monopoly, welfare aspect of monopoly. Monopolistic competition, price and output determination. Excess capacity under monopolistic competition.

### UNIT 3

Oligopoly – price and output determination; Classical models of duopoly. Collusive oligopoly-cartels. Price-Leadership model; Kinked demand curve theory; Bilateral monopoly. Baumol's model of sales revenue maximization.

### UNIT 4

Marginal productivity theory, Euler's theorem and product exhaustion problem. Classical and modern theory of rent, quasi rent. Theories of profit.

### Basic Reading List:

- Koutsoyiannis, A. (1979), *Modern Microeconomics*, (2nd Edition), Macmillan Press, London
- Kreps, David M. (1990), *A Course in Microeconomic Theory*, Princeton University Press, Princeton.
- Layard, P.R.G. and A. W. Walters (1978), *Microeconomic Theory*, McGraw Hill, New York.
- Sen, A. (1999), *Microeconomics Theory and Applications*, Oxford University Press, New Delhi.

## **Additional Reading List**

### **UNIT 1**

De Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

### **UNIT 2**

Archibald, G. C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.

Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

### **UNIT 3**

Archibald, G. C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.

Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.

Archibald, G. C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.

Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.

Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

### **UNIT 4**

Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.

Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.

## ECO-408-MACROECONOMIC ANALYSIS-II

### OBJECTIVE

The student will learn about uses, problems and measurement of important economic aggregates like national income, money supply and its determinants, various theories about demand for money, inflation and business cycles-their causes, effects and remedies.

### OUTCOME

The paper entitled Macro Economic Analysis-II helps the students at the postgraduate level to understand systemic facts for empirical analysis. The students will be able to appreciate and understand the various economic policies declared by the government from time to time.

#### UNIT:01

Approaches towards Determination of Money Supply: Conventional, RBI Approach to Money Supply; High Powered Money and Money Multiplier; Budget Deficits and Money Supply; Control of Money Supply.

#### UNIT-02

Classical Approach to Demand for Money: Classical, Keynes, Keynesian and modern Approaches.

#### UNIT-03

Classical, Structural and Monetarist Approaches to Inflation; Inflationary Gap and Double Inflationary Gap (Bent Hanson); Phillips Curve Analysis Short Run and Long Run Phillips Curve.

#### UNIT-04

Business Cycle Theories Samuelson and Hicks. Macroeconomics in an open economy: Mundell-Flemming Model. Recent Developments in Macroeconomic Policies.

### Basic Reading List :

- Ackley, G. (1978), *Macroeconomics • Theory and Policy*, Macmillan, New York.
- Branson, W. A. (1989), *Macroeconomic Theory and Policy*, (3rd Edition), Harper and Row, New York.
- Dornbusch, R. and F. Stanley (1997), *Macroeconomics*, McGraw Hill, Inc., New York.
- Hall, R. E. and J. B. Taylor (1986), *Macroeconomics*, W. W., Norton, New York.
- Heijdra, B. J. and V. P. Frederick (2001), *Foundations of Modern Macroeconomics*, Oxford University Press, New York.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Romer, D. L. (1996), *Advanced Macroeconomics*, McGraw Hill Company Ltd., New York.
- Scarfe, B. L. (1977), *Cycles, Growth and Inflation*, McGraw Hill, New York.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.

### **Additional Reading List**

#### **UNIT 1 :**

- Edey, M. and A. T. Peacock (1967), National Income and Social Accounts, Hutchinson University Library, London.
- Powelson, J. P. (1960), National Income and Flow of Funds Analysis, McGraw Hill, New York.
- Rao, V. K. R. V. (1983), India's National Income • 1950 to 1980, Sage Publications, New Delhi.
- Ruggles, R. and N. Ruggles (1956), National Income Accounts and Income Analysis, McGraw Hill, New York.
- United Nations (1974), Year Book of National Account Statistics.

#### **UNIT 2 :**

- Chakravarty, S. C. (1985), Report of the Committee to Review the Working of the Monetary System, Reserve Bank of India, Bombay.
- Gupta, S. B. (1995), Monetary Planning in India, Oxford University Press, New Delhi.
- Gurley, J. and E. S. Shaw (1960), Money in a Theory of Finance. Brookings Institution, Washington.
- Mckinen, G. E. (1976), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.
- Redy, Y. V. (2000), A Review of Monetary and Financial Sector Refoms in India—A Central Banker's Perspective, UBSPD, New Delhi.

#### **UNIT 3 :**

- Friedman, M. (1956), Studies in the Quantity Theory of Money, The University of Chicago Press, Chicago.
- Keynes, J. M. (1936), The General Theory of Employment, Interest, and Money, Macmillan, London.
- Laidler, D. E. W. (1977), Demand for Money • Theory and Evidence, Dum-Don Valley, New York.
- Mckinen, G. E. (1978), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.

#### **UNIT 4 :**

- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge.
- Hagger, A. J. (1977), Inflation • Theory and Policy, Macmillan, London.
- Hudson, J. (1982), Inflation • A Theoretical Survey and Synthesis, George Allen and Unwin, London.
- Sheffrin S. M. (1996), Rational Expectations, Cambridge University Press, Cambridge.
- Gordon, R. A. (1961), Business Fluctuations, Harper and Row.
- Gordon R. A. and L. R. Klein (Eds.), (1965), Readings in Business Cycles, Irwin, Homewood.
- Hicks, J. R. (1950), A Contribution to the Theory of Trade Cycles, Clarendon Press, Oxford.
- Lucas, R. (1981), Studies in Business Cycle Theory, M.I.T. Press, Cambridge, Massachusetts.

## ECO409-MANAGERIAL ECONOMICS-II

### OBJECTIVE

This paper is designed with the purpose of imparting knowledge to the students about various administrative and logistical aspects of business. Process of business decisions, business risks and different statistical tools useful for the analysis of business development etc., would be taught under this subject.

### OUTCOME

On successful completion of the studies, the students would possess wide knowledge of various legal and administrative formalities that are considered to be an integral part of the industrial development policies of the Government of India. The learning of project planning, decision making under competition and uncertainty, different statistical methods used for business analysis etc. would prepare the students to become a part of the decision making team of the management in industry as well as commerce.

### UNIT 1

Decision & Risk Analysis:-Business Decision Making, Certainty, Risk & Uncertainty. The Pay-off Matrix, Sources of Business Risk & Steps involved in the Analysis of Risky Decisions.

Risk in Project Analysis:-The Expected Value & The standard Deviation Method for Decision Making. Coefficient of Variation and Decision Making.

### UNIT 2

Public sector decisions: Evaluation of Benefits & Costs. Cost-Benefit Analysis. Pricing by Public Sector- Marginal cost pricing, Ramsey pricing & Average cost pricing.

Location Decisions-Determinants of Location. Theories of Location-Weber's Deductive Theory & Sargent Florence's Inductive Theory

### UNIT 3

Profit: policy, planning, control and forecasting-Break-even analysis.

Taxation and decision making: excise taxes, taxes on profit, taxes on inputs, property taxes, tax preferences

### UNIT 4

Game Theory:-Meaning & Basic Definitions & Terminology-strategy, payoff matrix, optimal strategy & value of game. The Two Person Zero-Sum Game, Minimax & Maximin criterion. Dominant Strategy. Nash Equilibrium. Prisoner's Dilemma.

Linear programming — primal and dual problem, simplex method; transport and storage problems.

### Books Recommended

Dominick Salvatore, 'Managerial Economics', McGraw Hill International Editions.

Peterson C.H. and Lewis WC, 'Managerial Economics', Eastern, Economic Edition, Prentice Hall of India,

Miller R. and Meiners R, 'Intermediate Micro Economics', McGraw Hill Publishers.

Pindyou R. and Rubinfeld D.L. , 'Microeconomics', Prentice Hall of India.

### Additional Reading List :

Brigham E.F. and Pappas J.L , Managerial Economics, Dried & Press

Diwedi D.N, Managerial Economics, Vikas Publishing House, New Delhi

Dwivedi, R.S, Organisational Behaviour, McMillan Publishing

Jain T.R. , Economics for Managers, V.K Publications

Mehta P.L Managerial Economics, Sultan Chand, New Delhi

Salvatore, Managerial Economics in Global Economy, Thomson Learning, Bombay

Varshnay R.L., Managerial Economics, Sultan Chand Publications

## ECO-410 – INTERNATIONAL ECONOMICS-II

### OBJECTIVE

This subject has the focus on foreign exchange and balance of payments that forms the backbone of the international trade of each country. The foreign trade policy of the government of India is an important part of this subject.

### OUTCOME

Since the implementation of economic reforms the Indian economy has attracted various global players. This subject imparts knowledge about the working of foreign exchange market, balance of payment and international trade policies of the government of India. The benefits of this subject will be fully reaped by those students who get the opportunity to work in trading houses and financial institutions.

### UNIT 1

Balance of payment, structure, causes of disequilibrium in BOP. Measures to correct BOP – automatic adjustment under the fixed and flexible exchange rates. Approaches for BOP – Elasticity, absorption, monetary and income approach; Devaluation, foreign trade multiplier.

### UNIT 2

Expenditure changing policies; Monetary and Fiscal policies. Monetary and Fiscal policies mix for achieving internal and external equilibrium simultaneously, Swan Diagram. Assignment problem-Mundellian model of monetary and fiscal policies. Expenditure switching policies.

### UNIT 3

Determination of foreign exchange rate; Theories of foreign exchange rate- Mint parity theory- Purchasing power parity theory-Balance of payment theory. Causes of changes in exchange rate; Flexible exchange rates - case for and against; fixed exchange rates - case for and against; hybrid and multiple exchange rates. Foreign exchange market–spot and forward exchange markets premiums and discounts, hedging, interest arbitrage, speculation.

### UNIT 4

Direction and composition of trade in India and its implications. Trade Policies in India, critical evaluation of trade reforms since 1991.

### Basic Reading List:

- Bhagwati, J. (Ed.) (1981), *International Trade, Selected Readings*, Cambridge, University Press, Massachusetts.
- Carbough, R. J. (1999), *International Economics*, International Thompson Publishing, New York.
- Chacholiades, M. (1990), *International Trade • Theory and Policy*, McGraw Hill, Kogakusha, Japan.
- Dana, M. S. (2000), *International Economics • Study, Guide and Work Book*, (5th Edition), Routledge Publishers, London.
- Dunn, R. M. and J. H. Mutti (2000), *International Economics*, Routledge, London.
- Kenen, P. B. (1994), *The International Economy*, Cambridge University Press, London.
- Kindleberger, C. P. (1973), *International Economics*, R. D. Irwin, Homewood.
- King, P. G. (1995), *International Economics and International Economics Policy : A Reader*, McGraw Hill, International, Singapore.
- Krugman, P. R. and M. Obstfeld (1994), *International Economics : Theory and Policy*, Glenview, Foresman.



Salvatore, D.(1997), International Economics, Prentice Hall, Upper Saddle River, N. J., New York.  
Soderston, Bo (1991), International Economics, The Macmillan Press Ltd.,London.

**Additional Reading List :**

**UNIT 1**

Bhagwati, J. (Ed.) (1981), International Trade : Selected Readings, Cambridge University Press, Mass.  
Corden, W. M. (1965), Recent Developments in the Theory of International Trade, Princeton University Press, Princeton.

Greenway, D. (1983), International Trade Policy, Macmillan Publishers Ltd., London.

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Barrow, R. J. (1979), Macro Economic, 4th Edition, John Wiley, New York.

Clement, M. O., R. L. Pffister and K. J. Rothwell (1969), Theoretical Issues in International Economics Cosntable Publication, London.

Corden,W.M.(1974),Trade Policy and Economic Welfare, Clarendon Press, Oxford.

**UNIT 2**

Goldstein, M. (1998), The Asian Financial Crisis :• Causes, Cure and Systematic Implication, Institute for International Economics, Washington, D.C.

Jackson, J. (1989), The World Trading System, Cambridge University Press, Mass.

**UNIT 3**

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Pomfret, R. (1988), Unequal Trade : The Economics of Discriminatory International Trade Policies, Black well Publishers, Oxford.

**UNIT 4**

Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.

Brahmananda, P. R. (1982), The IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.

Grable, J. O. (1996), International Financial Markets, Prentice Hall, Englewood Cliffs, New York.

Kenen, P. B. (1995), Economic and Monetary Union in Europe, Cambridge University Press, U.K.

Kindleberger, C. P. (1996), A History of Financial Crisis : Manias, Panics and Crashes, (3<sup>rd</sup> Edition), John Wiley and Sons, New York.

Manmohan Singh (1964), India's Export Trends and the Prospects for Self-sustained Growth, Oxford University Press, New Delhi.

Mishkin, S. F. (1998), The Economic of Money, Banking and Financial Markets, (5th Edition), Harper Colins Publishers, New York.

Mundell, R. (1968), International Economic, The Macmillan Company Ltd., New York.

Nayyar, D. (1976), India's Exports and Export Policies in the 1960s, Cabbridge University Press.

Panchmukhi, V. R. (1978), Trade Policies of India — A Quantitative Analysis, Concept Publishing Company, New Delhi.

Panchmukhi, V. R., K. M. Raipuria and R. Tandon (1987), Money and Finance in World Economic Order, (RIS), Indus Publishing Co., Delhi.

Pomfret, R. (1996), International Trade : An Introduction to Theory and Policy, Basil Blackwell, Oxford.

Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.

Tew, B. (1985), The Evaluation of the International Monetary System : 1945-1985, Hutchinson.

# **ECO-411 QUANTITATIVE TECHNIQUES AND RESEARCH METHODS IN ECONOMICS-II**

## **OBJECTIVE:**

The main objective of this paper is to train the students to use the techniques of mathematical and statistical analysis, which are commonly applied, to understand and analyze economic problems. The emphasis of this paper is on understanding economic concepts with the help of mathematical and statistical methods rather than learning mathematics and statistics itself.

## **OUTCOME:**

After studying this paper a student will be initiated into various economic concepts, which are amenable to mathematical and statistical treatment. The paper also deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

## **UNIT 1**

Probability-Variations definitions; Laws of addition and multiplication; Conditional probability and concept of interdependence; Baye's theorem and its applications; Theoretical Probability Distributions And their application in economics.

## **UNIT 2**

Correlation Analysis -Meaning, assumptions, limitations of simple correlation, methods of finding correlation, Karl Pearson's coefficient of correlation and rank correlation coefficients, probable error. Regression analysis; Concept of least squares and the lines of regression; Standard error of estimate.

## **UNIT 3**

Meaning of estimation. Point and interval estimation, Characteristics of a good estimator. One tail and two tail tests. Testing of hypothesis; Concept of hypothesis testing, Type — I and Type II errors, Testing of Means, Proportions, equality of population means, two variances etc. Z-test.

## **UNIT 4**

Time series Analysis — Estimation of trend. Seasonal Indexes and Tests of Randomness. Forecasting based on time series analysis.

## ECO-412- ENVIRONMENTAL ECONOMICS-II

### OBJECTIVE

The objective of this paper is to impart knowledge about the importance of environment for the survival of life on the planet earth. This paper is designed to teach about the availability of environmental resources, evaluation of resources, measures adopted for the management and protection of natural resources and different international treaties related to environment protection.

### OUTCOME

After completion of studies the students are expected to play an important role in the implementation of sensitization programs aimed at environment protection. The knowledge of environment related issues would add additional qualities in the students and make them conscious about environment protection at every walk of life in their professions.

### UNIT 1

Environment as a source of all economic resources. Natural resources- nature, type and characteristics - renewable and non-renewable Use of natural resources for development - environment economics of exhaustible and renewable resources. Common property resources- concept, nature of CPR, uncertainty of CPR.

### UNIT 2

History of environment valuation, definition and importance of environment valuation, direct method of environment valuation CVM, indirect method of environment valuation TCM and Hedonic pricing. Issues in environment valuation.

### UNIT 3

Meaning of NRMP, NRMP of India - forest, joint forest management - social forestry, water-participatory irrigation management, Involvement of voluntary sector - NGO's - in NRM programs, Case studies of NRM - AKRSP/ DSC , etc.

### UNIT 4

Environment and WTO, Treaties in bio-diversity, Kyoto protocol, Montreal protocol, UN convention on climate change, Ramsar, etc. Environment protection movements in India and Gujarat. New Environmental Policy with respect to India.

### Books Recommended

- Dasgupta Parth (1982) : The Control of Resources, Harward University Press, Cambridge, Mass.  
Davis Kingsley and Mikhail S. Bernstam (1991) : Resources, Environment and Population, Oxford University Press, New York.  
Pearce and Turner (1990) : Economics of Natural Resources and the Environment.  
Randall Alan (1987) : Resource Economics : An Economic Approach to Natural Resources and Environmental Policy, 2nd ed., John Wiley, New York.  
Turner Kerry R. (ed.) : Sustainable Environmental Economics and Management: Principles and Practices.