

PANJAB UNIVERSITY, CHANDIGARH
(Esttd. under the Panjab University Act VII of 1947-enacted by the Govt. of India)

FACULTY OF ARTS

$$\frac{E \cdot E \cdot E \cdot f}{E \cdot E \cdot E \cdot Y}$$

BA EC C E A Y E DA EC Y
 s s

The objective of this paper is to acquaint the students with the strategy of economic development of the Indian Economy since Independence. The paper also aims at creating an awareness among the students regarding the contemporary issues pertaining to various sectors of the economy.

Instructions of the paper are as follows

- The maximum marks for the paper will be 100. The question paper will be of 80 marks and continuous evaluation 20 marks. Time allowed will be 3 hours.

The paper shall consist of 10 questions in all.

- There shall be 10 questions in all.

The first question compulsory comprising 15 short answer type questions spread over the whole syllabus. The candidates are required to attempt 10 questions. Each question shall be of 20 marks (10x2= 20).

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each unit. Each question will carry 15 marks (15x4=60).

Labour Market Demand for and Supply of Labour Curves.

Labour Market Equilibrium : Classical and Keynesian Views.

Classical and Keynesian Models of Income and Employment Determination.

Wage-Price Flexibility and Automatic Full Employment – Classical Versus Keynesian Approach.

Inflation Effects, Quantity Theory, Keynes' Theory, Phillips Curve Analysis – Short Run and Long Run, Structural Theory.

Trade Cycle Hansen-Samuelson Accelerator – Multiplier Interaction Model, Hicks Model, Kaldor Model. Causes and Consequences of Great Depression and Global Economic Crisis.

Balance of

!

Importance of Trade and Trade Theories: Importance of the Study of International Economics: Inter-Regional and International Trade, Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs, Heckscher-Ohlin Theory of Trade – Its main Features, Assumptions and Limitations.

New Approaches to Trade Theory: The Product Cycle Theory, Technology Gap Theory.

.

Terms of Trade Concept, Measurement and Effects on Nation's Welfare.

Trade Policy: Free Trade and Protective Trade.

Tariff and Non-Tariff Barriers: Economic Effects of Tariff under Partial Equilibri

BA EC

Mathematical Economics

2023

20

The paper aims to make the students familiar with some of the mathematical techniques which have been developed in the last few decades to solve the basic and one of the fundamental problems faced by economic agents, i.e. economizing at a particular point of time or over a period of time.

Course 80% Class room teaching, 20% Computer Practical and Viva-voce examination.

AB Basic Commands of MATLAB, Solving Matrices using MATLAB, Solving Linear Programming, Non-Linear Programming and Dynamic Optimization problems Using MATLAB. Solution of Games in MATLAB through Linear Programming.

Essential References

- Dixit, A (1976) : Optimization in Economic Theory, Oxford University Press.
- Alpha C Chiang (1999) : Elements of Dynamic Optimization, Wavel and Pvt. Ltd.
- Robert Gibbons (1992) : Primer in Game Theory, Pearson Books.
- Alpha C Chiang (1984) : Fundamental Methods of Mathematical Economics, McGraw Hill.
- R K Sundram (1996) : A First Course in Optimization Theory, Cambridge University Press.
- Martin J. Osborne (2004) : An Introduction to Game Theory, Oxford University Press, New Delhi.
- Hugh Gravelle and Ray Rees (1992) : Microeconomics, Pearson Education.
- Gilat, A. (2007) : Matlab: An Introduction With Applications, Wiley India Pvt. Ltd.
- Kirani, S.Y. (2007) : Matlab Programming, PHI, India.
- Yang, Cao, Chung and Morris (2007) : Applied Numerical Methods Using Matlab, Wiley India Pvt. Ltd.

References

- Intriligator, M.D. (1971) : Mathematical Optimization and Economic Theory, Prentice Hal)

1
E E E f

Essays

- Nayak, P. (Ed.) (2015) : Economic Development of India, Routledge, London.
- Nagaraj, R (2006) : Aspects of India's Economic Growth and Reforms, Academic Foundation, New Delhi.
- Krueger, A O (Ed.) (2003) : Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi.
- Ramaswamy, V S & Namakumari, S (1999) : Strategic Planning and Formulation of Corporate Strategy – Text and Cases, MacMillan, New Delhi.
- Ahluwalia, I J & Liittle, IMD (Eds.) (1998) : India's Economic Reforms and Development, (1998) (Essays in Honour of Manmohan Singh), OUP, New Delhi.

References

- Rosen, George, (1988) : Industrial Change in India 1970-2000 Allied Publishers, New Delhi.
- Economic Survey : Government of India: Various Issues.
- Economic and Political Weekly : Various Issues

Human Resource Development (HRD): Human Resource Development in National Perspective. Relevance of Human Resource Development in India.

Human Resource Development in organizational perspective. Traditional and Modern approach to study Human Resource Development.

The Global Perspectives on Human Resource Development: Emerging Human Resource Management Concepts in the New Millennium, Human Resource Information System.

ಮಾನವ ಸಂಪನ್ಮೂಲ

Concept and measurement of human capital.

Investing in Human Capital: Becker's Model. Concept of 'On the Job training' and 'retraining'.

Endogenous Growth: Role of Education, Research and Knowledge: Arrow, Romar and Lucas Model.

ಮಾನ್ಯತೆ ಮತ್ತು ಸಂಪನ್ಮೂಲ

Techniques of labour Demand forecasting, Establishing pay plans. Various incentive schemes.

Internal Labour Market.

Asymmetric Information in the Functioning of the human Resource Market: Principle Agent Problem, Market Signaling, Efficiency Wage Theory.

ಮಾನವ ಸಂಪನ್ಮೂಲ ಸಂವಹನ ಮತ್ತು ಅಭಿವೃದ್ಧಿ

Migration : Migration as Human Capital Investment, Rural Urban Migration (Harris-Todaro Model), Welfare Implications of International Migration; Emerging Challenges of Migration and Issue of Brain Drain.

Economics of Discrimination- Concept, Types and Models of Discrimination (Becker, Crowding Model and Theory of Statistical Discrimination).

Essential Readings:

Campbell, R McConnell, : Contemporary Labor Economics,
Brue Stanley, L and McGraw- Hill Book Company, New York.
Macpherson David A. (2009)

Mankin, David (2009) : Human Resource Development,
Oxford University Press.

Schultz, Theodore W (1981) : Investing in People: The Economics of Population
Quality, Hindustan Publishing Corporation , (India),
Delhi.

Kempton, John : Human Resource Management and Development:
Current Issues and Themes McMillan, London.

Further Readings:

Becker, Gray S (1957) : Economics of Discrimination
University of Chicago Press, Chicago.

Risk and Return: Sources and Types of Risk and Return – Historical and Expected, Measurement of Risk, Efficient Portfolio, Minimum Variance Portfolio, Capital Asset Pricing Model, Efficient Market Hypothesis, Speculation, Arbitrage and Hedging – Concept and Significance.

Indian Financial Markets:

In an Evolving Market Participants, Structure and Instruments, Banking Sector Reforms since 1991

In an Capital Market Primary and Secondary Market, Growth, Problems and Reforms since 1991.

Market for Derivatives – Futures and Options.

Role and Structure of Non Banking Financial Institutions.

RBI – Role and Functions, Monetary Policy of RBI.

SEBI – Role and Functions.

International Financial Markets – Structure and Significance.

Essential Readings:

- Bhole, L M (2003) : Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi (4th Ed.)
- Bhole, L M (2000) : Indian Financial System, Chugh Publications, Allahabad.
- Houthakker, H S and Williamsob, PJ (1996) : Economics of Financial Markets. Oxford University Press.
- Fabozzi Frank, J Modigliani (2002) : Foundation of Financial Markets and Institutions, Pearson Ed.

Further Readings:

- Khan, M Y (1996) : Indian Financial System, Tata McGraw Hill, New York.
- Prasad, K N (2001) : Development of India's Financial System, Sarup & Sons, New Delhi.
- Reserve Bank of India : Various Reports
- Government of India : Economic Survey (Various Issues)

BA / EC

E / A EC

C

1 2 3

4 5

This paper aims to make aware students about the importance of environment in economics and vice-versa. It helps them to know the ways of sustaining our natural resources by optimally allocating them for future use.

Essential Readings:

- Eugine, T. (2005) : Environmental Economics. Varinda Publications, Delhi.
- Goodstein, E.S. (2002) : Economics and the Environment (third edition)
John Wiley & Sons., Inc.
- Hussen, Ahmed (2004) : Principles of Environmental Economics
(se t (se

Schramm Wilber (ed.) : Mass Communication, University of Illinois,
Illinois.

McLuhan Marshall : Understanding Media,
Routledge and Kegan Paul, London.

Production Analysis: Homogeneous and Homothetic Production Functions; Eulers Theorem; Elasticity of Substitution; Cobb-Douglas, CES and VES Production Function.

Output and Profit Maximization, Cost Minimization; Analysis of Joint Profit Maximization and Multi-Product Firm; Production Possibility Curve.
Duality in Production.

Price and Output under Perfect Competition; Monopoly, Oligopoly Models; Cournot, Bertrand and Stackleberg.

Dynamic Equilibrium with Lagged Adjustment; Cobweb Model, Multi-Market Equilibrium, Walras's Law and the Existence of General Equilibrium.

Essential Readings:

- Comerer, Colin, F, George : Behavioural Economics.
Loewenstien and Mathew Robin : New Age International Publishing (Ed.)
(2006) : Princeton.
- Michael Szenberg and Lall Ram : New Frontiers in Economics
Rattan (Ed.) (2004) : Cambridge, Cambridge University Press.
- Henderson, J M and Quandt, R B : Micro Economic Theory: A Mathematical
(1988) : Approach(3rd Ed.), McGraw Hills, New Delhi.
- Silberberg, E (1978) : The Structure of Economics – A Mathematical
Analysis. McGraw Hills, New York.
- Varian, H R (1992) : Microeconomic Analysis (3rd Ed.), Norton &
Company, New York.
- Mas-Coell, Adrew, W M D and : Microeconomic Theory, Oxford University Green,
J R (1995) : Press, New York.
- Pyndick, R S and Robinfield, D L (2003): Microeconomics, Pearson Education, Inc.

AD, A CED, AC f EC, C' .E - Y

Essential Readings:

- Branson W (1989) : Macro economic Theory and Policy. 3rd Edition, Harper Collins.
- Dornusch, R (1980) : Open Economy Macroeconomics Basic Books.
- Dornbusch, Fisher and Startz (2002) : Macroeconomics, Ninth Edition, Tata McGraw Hills, New Delhi.
- Froyen, R (2002) : Macro Economics, 7th Edition, Pearson Education Inc., New Delhi.
- Makin, A J : International Macroeconomics, Princeton Hall.
- Mankiw, N and Romer, D (1991) (ed.) : New Keynesian Economics, MIT, 2 Volumes.
- Pentecost Eric (2000) : Macroeconomics – An Open Economy Approach, Macmillan Press Ltd.
- Raghbendra, Jha (2008) : Contemporary Macroeconomics: Theory and Policy. New Age International Publishers.
- Sheffrin, S (1999) : Rational Expectations, Cambridge University Press.
- Samuelson, P A and Nordhaus, W D (2012) : Macroeconomics, Tata McGraw Hill Education Pvt. Ltd., New Delhi.
- Snowden Brian and Vane Howard R (2005) : Modern Macroeconomics: Its Origins, Development and Current State, Edward Elgar, U K.
- Ghosh, Chandna and Ghosh, A : Macroeconomics, PHI Learning Pvt. Ltd., New Delhi.
- Wendy Carlin/Soskice David (2007) : Macroeconomics : Imperfections, Institutions and Policies. Oxford University Press.

Supplementary Readings:

- Abel Andrew B, Bernanke Ben S (2007) : Macroeconomics. Pearson Education Inc., (5th Edition) New Delhi.
- Heijdra Ben J & Ploeg Frederick Van der (2008) : The Foundations of Modern Macroeconomics, Oxford University Press.
- D'Souza Errol (2008) : Macroeconomics. Pearson Education Inc., New Delhi.

A EC EC E C A CA

2 2 s

s

t The aim of this course is to provide an overview o

There shall be 9 questions in all.

The first question **o p s o** comprising 15 short answer type questions spread over the whole syllabus. The candidates are required to attempt 10 questions. Each question shall be of two marks (10 x 2= 20).

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each unit. Each question will carry 15 marks (15x4=60).

Introduction to public policy: Definition, Scope and Need for Public Policy. Role of the Government in Public Policy Making. Policy Making Process. Policy Implementation. Policy Evaluation – Assessing the Impact of Public Policy. Policy Analysis.

Models of Public Policy - Institutional, Process, Incremental, Group, Elite, Public Choice and Game Theory Model. Attributes of a Good Policy Making Process. Problems in Policy Making. Policy Memo – Writing an Effective Policy Memo.

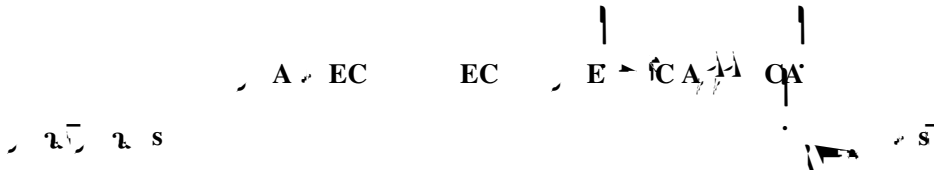
Institutions and Governance Political Institutions and Governance. Role of Good Governance in Public Policy. Economic Governance. Policy Failure - Limits to public policy and State Capacity. Public Policy vs. Populism.

Economic Policy: Economic Theories as Policy Guides. Overall Economic Policy Framework in India with Special Reference to the Relevance of Planning Commission of India. Niti Ayog- its Objectives and Functions. Weaknesses in India's Public Policy Making Process. Reforming the Process and Institutions. Competition Policy, Consumer Protection Act.

Essentic

Essential Readings:

- Goon, P : An Outline of Statistical Theory, World Press Pvt. Ltd., Calcutta.
- Kumar Pranesh, Singh Daroga, Singh, Padam : Handbook of Sampling Methods, Indian and Agricultural Statistics Research Institute, ICAR.
- Anderson, T W : An Introduction to Multivariate Statistical.
- Goode, W J and Hatt, Paul K (1952) : Methods in Social Research. McGraw Hill Book Company, New York.
- Sukhatme and Sukwatme (1970) : Sampling Theory of Surveys with Applications. John Wiley and Sons.
- Tripathi, P C. (2008) : A Textbook of Research Methodology, Sultan Chand.
- Kumar, Ranjit (2009) : Research Methodology: Methods and Techniques, New Age International, India.



t \ The aim of this course is to provide an overview of the State-of-the-art of econometric

Forecasting

- Introduction: Nature, Importance and Evaluation of Forecast.
- Univariate Methods: Smoothing Methods.
- Multivariate Methods: Regression Models.
- Non-Parametric Methods: Judgment Methods; Technological Forecasting.
- Comparison of Forecasts: Combination of Forecasts – Techniques and Benefits.

Applications to Demand Analysis

- Theory of Household.
- Single-equation Approaches: Engle Functions, Demand

Palanivel Thangavel & Lawrence R : “An Econometric Model of India with Emphasis
Klien (1999) On the Monetary Sector”, *Development
Economics*, Vol. XXXVII, No. 3 pp. 275 – 336.

ns t u t ons o ap s tt un un t s

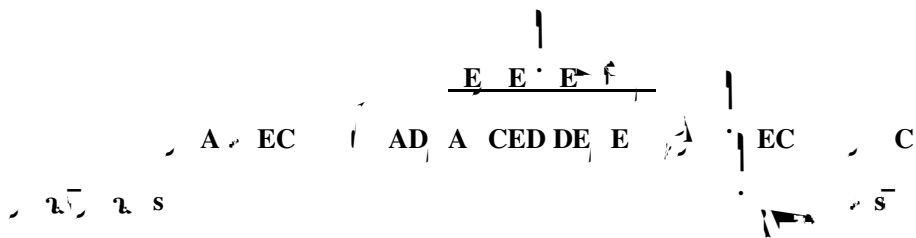
- The maximum marks for the paper will be 100. The question paper will be of 80 marks and continuous evaluation 20 marks. Time allowed will be 3 hours.

i ap s tt us pt unq nt qu t on pap nt s g a

- There shall be questions in all.

The first question o pu so comprising 15 short answer type questions spread over the whole syllabus. The candidates are required to attempt 10 questions. Each question shall be of 2 marks (10 x 2 = 20).

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each



As a sequel to the post-second war developments, the study of Economic Development gained impetus primarily because three-fourth so humanity was experiencing wretched conditions of existence. There was a pressing need in those countries for uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity, in consonance with their priorities.

Since a variety of perspectives were available, the policy makers were eager to acquaint themselves with various policy options in their bid

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each unit. Each question will carry 15 marks ($15 \times 4 = 60$).

!

Theories and Models of Economic Growth: Harrod-Domer Model of Growth; R. Solow's Neoclassical Growth Model.

Looking beyond the Neo-Classical Prism: Schultz vie

Thirlwall, A.P.(2003) : “Growth and Development”, Seventh edition, Palgrave Mcmillan, NewYork.

Ray, Debraj (2004) : “Development Economics”, Seventh impression, Oxford University Press, New Delhi.

Todaro, M.P. (2009) : “Economic Development” Pearson Education; Tenth Edition.

Sen, A K(ed.) (1970) : “Growth Economics: Selected Readings”, Penguin Books.

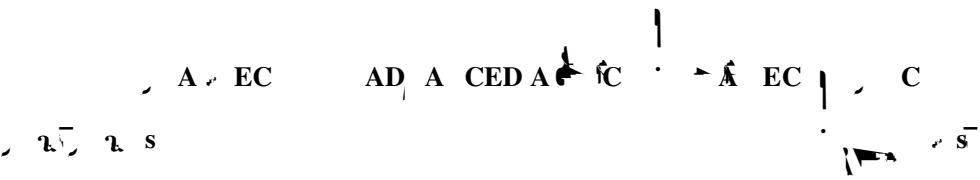
Aggarwal, A.N. and S.P. Singh (1982) : The Economics of Underdevelopment, Sixth Edition, Oxford University Press.

Further Readings:

Meier, Gerald M. and James E. Rauch (2000). : “Leading Issues in Economic Development”, Oxford University Press, New York.

Ghatak, Subrata (2003) : Introduction to Development Economics, Indian Reprint 2007, Routledge, London & NewYork.

Rist, Gilbert (2002) : The History of Development Academic Foundation, New Delhi.



The focus of this course is to introduce students to the importance of agricultural sector and to the issues associated with agricultural transformation, agricultural production and demand of and supply for agricultural commodities. The objective is to equip students to analyze and critically assess issues, policies and programmes in this areas with particular emphasis on Indian Agriculture.

- 80% Class room teaching.
- 20% Internal Assessment Comprising Unit Test, Assignment and Class room participation.

Maximum marks for the paper will be 100.

- The maximum marks for the paper will be 100. The question paper will be of 80 marks and continuous evaluation 20 marks. Time allowed will be 3 hours.

There shall be 10 questions in all.

- There shall be 10 questions in all.

The first question o p i s o comprising 15 short answer type questions spread over the whole syllabus. The candidates are required to attempt 10 questions. Each question shall be of t o marks ($10 \times 2 = 20$).

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each unit. Each question will carry 15 marks ($15 \times 4 = 60$).

Maximum marks of the paper shall be 100.

- The maximum marks for the paper will be 100. The question paper will be of 80 marks and continuous evaluation 20 marks. Time allowed will be 3 hours.

The paper shall consist of 10 questions in all.

- There shall be 10 questions in all.

- The maximum marks for the paper will be 100. The question paper will be of 80 marks and continuous evaluation 20 marks. Time allowed will be 3 hours.

- There shall be questions in all.

The first question o p u s o comprising 15 short answer type questions spread over the whole syllabus. The candidates are required to attempt 10 questions. Each question shall be of 2 marks (10 x 2= 20).

Rest of the paper shall contain four units. Two questions shall be asked from each unit and the candidates shall be given internal choice. The candidates shall attempt one question from each unit. Each question will carry 15 marks (15x4=60).

Introduction of Law and Economics:

- I Economic Analysis of Law: An Introduction
 - (a) Why do economists need to be concerned about law?
 - (b) Relationship between law and Economics
- II Economic Concepts and their Relevance to Law.
- III Legal Concepts
 - (a) The Common Law and the Civil Law Traditions
 - (b) Introduction to Judicial System in India
 - (c) Economic Approach to Legal Rules
 - (d) Methodological Aspects of Legal Rules

Economic Theory of Property Rights

- I Introduction
- II An Economic Theory of Property
- III Allocation of Property Rights
 - (a) First Come First Served
 - (b) Good Faith Purchase
 - (c) Title to Land
 - (d) Establishment of entitlements
 - i.) Property Rule
 - ii) Liability Rule
 - iii) Inalienability Rule
- IV. Property Rights
 - (a) Property, Social Discrimination and Law: Need for Affirmative Action/Protective Discrimination.
 - (b) Inequalities and Distributive Justice.

- Murali Prasad Panta : Business, Consumer and Government: Economic and legal Perspectives (India and Germany), Mittal Publications, New Delhi, 2001.
- Newman, P : Palgrave Dictionary of Economics and the Law.
- Shavell, Steven : Economic Analysis of Accident law, Massachuestts, Harvard University Press, 1987.
- Schmidth, P : An Economic Analysis of Crime and Justice, Academic Press, Orlendo, 1984.
- Tietenberg, T : Environmental Economic Policy, Addison Wesley, Boston, 2001, 3rd ed.
- Watal, J : Intellectual Property Rights in WTO and

: The design of Contract and Remedies for Breach, The

- : "On the limitation of Warranty Duration",
Journal of Industrial Economics, Vol.37,
No.3, 1989, pp. 287-301.
- Fanna, E.F. : Agency Problems and the Theory of the
Firm". Journal of Political Economy, Vol.88, 1980,
pp.288-306.
- Friedman, D. : "What is 'Fair Compensation' for Death or
Injury ?", International Review of Law and
Economics, Vol. 2, No.1, June 1982, pp.81-93.
- Hansmann, H. : The Economics and Ethics of Markets for
Human Organs, Yale Law School Working
Paper, 1988.
- Jensen, M.C. & : "The Theory of Firm, Managerial Behaviour
Meckling, W.H. Agency Costs, and Ownership Structure",
Journal of Financial Economics, Vol.3, 1976, pp.305-360.
- Kennedy, D. : "Cost-Benefit Analysis of Entitlement Problems:
A Critique of the Externality Concept", Stanford
Law Review, 33, 1981, 387, 393-400.
- Machlup, F : "Characteristics and Types of Price
Discrimination", in Business Concentration and
Price Policy, Princeton University Press,
Princeton, 1975, pp. 343-397.
- Nelson, P. : "Advertising as Information", Journal of
Political Economy, 1974, pp. 729-754.
- Peltzman, S : "Toward a More General Theory of Regulation",
Vol.19, 1976, pp.211-240.
- Philips, L. & Moras, I.M. : "The AKZO Decision: A Case of Predatory
Pricing?", Journal of Industrial Economics,
Vol.41, 1993, pp. 315-321.
- Posner, A.Richerd : "The Chicago School of Antitrust Analysis", University
of Pennsylvania Law Review, Vol. 127, 1979,

Shavell, Steven : "A Model of the Optimal Use of Liability and Safety Regulation", *Ran Journal of Economics*, Vol. 15, No.2, Summer 1984, pp. 271-280.