

# **FACULTY OF ECONOMICS & BUSINESS**

## **SYLLABUS**

**For**

**M.A. (Economics)  
Semester I– IV**

**(Under Continuous Evaluation System)**

**Session: 2019-20**



**The Heritage Institution  
KanyaMahaVidyalaya, Jalandhar  
(Autonomous)**

## **Program Specific Outcome – M.A. (Economics)**

M.A. Economics is two year post graduate course with five subjects in each semester. The basic objective of M.A. Economics is to develop strong theoretical base along with practical skills of students associated with economic theories and real world internal as well as international economic problems. This course will help to develop academicians, researchers, analysis, bankers and anchors

**Upon successful completion of this course, students will be able to:**

**PSO1:** understand basic and advanced economic theories related to micro economics, macro economics, International trade, Economic Development & Planning etc.

**PSO2:** learn basic and advance data analysis techniques and their theoretical base.

**PSO3:** also learn how to apply the analytical tools to solve the real world economic problems.

**PSO4:** learn and understand basic problems and issues of Indian and Punjab Economy.

**PSO5:** learn and evaluate various policy measures which are very critical for the solution of economic problems.

**P.G. DEPARTMENT OF ECONOMICS**  
**Scheme of Studies and Examination**  
**M.A.(Economics)-Sem I**

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
MECL-1171	Micro Economics-I	C	100	80	-	20	3
MECL-1172	Macro Economics-I	C	100	80	-	20	3
MECL-1453	Quantitative Methods for Economists-I	C	100	80	-	20	3
Optional Subjects							
MECL-1174 (OPT-__)	Option to be selected from Table below	E	100	80	-	20	3
MECL-1175 (OPT-__) / MECM-1125 (OPT- XI)	Option to be selected from Table below	E	100 100	80 50	- 30	20 20	3/ 3+3
	Total		500				

**Any two of the following options:**

Sr. No.	Paper Title
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure

**Note: (i) C- Compulsory Subject E –Elective**

**P.G. DEPARTMENT OF ECONOMICS**  
**Scheme of Studies and Examination**  
**M.A.(Economics)-Sem II**

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
MECL-2171	Micro Economics-II	C	100	80	-	20	3
MECL-2172	Macro Economics-II	C	100	80	-	20	3
MECL -2453	Quantitative Methods for Economists-II	C	100	80	-	20	3
Optional Subjects							
MECL-2174 (OPT-__)	Option to be selected from Table below	E	100	80	-	20	3
MECL-2175 (OPT-__) / MECM-2125 (OPT- XI)	Option to be selected from Table below	E	100 100	80 50	- 30	20 20	3/ 3+3
	Total		500				

**Any two of the following options:**

Sr. No.	Paper Title
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure

**Note: (i) Any two of the options not already opted for in Semester I.**

**(ii) C- Compulsory Subject E –Elective**

**P.G. DEPARTMENT OF ECONOMICS**  
**Scheme of Studies and Examination**  
**M.A. (Economics) - Semester III**

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext.		CA	
				L	P		
MECL-3171	Economics of Development	C	100	80	-	20	3
MECL-3172	International Economics-I	C	100	80	-	20	3
MECL-3173	Indian Economy	C	100	80	-	20	3
Optional Subjects							
MECL-3174 (OPT-__)	Option to be selected from Table below	E	100	80	-	20	3
MECL-3175 (OPT-__) / MECM-3125 (OPT- XI)	Option to be selected from Table below	E	100 100	80 50	- 30	20 20	3/ 3+3
	Total		500				

**Any two of the following options:**

Sr. No.	Paper Title
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure

**Note:(i) Any two of the options not already opted for in Semester I and Semester II.**  
**(ii) C- Compulsory Subject E –Elective**

**P.G. DEPARTMENT OF ECONOMICS**  
**Scheme of Studies and Examination**  
**M.A. (Economics) - Semester IV**

Course Code	Course Name	Course Type	Marks				Examination time (in Hours)
			Total	Ext. L	P	CA	
MECL-4171	Economics of Planning	C	100	80	-	20	3
MECL -4172	International Economics-II	C	100	80	-	20	3
MECL - 4173	Punjab Economy	C	100	80	-	20	3
<b>Optional Subjects</b>							
MECL -4174	Option to be selected from Table below	E	100	80	-	20	3
ECL -4175 (OPT-___) / MECM-4125 (OPT- XI)	Option to be selected from Table below	E	100 100	80 50	- 30	20 20	3/ 3+3
	<b>Total</b>		<b>500</b>				

**Any two of the following options:**

Sr. No.	Paper Title
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure

**Note: (i) Any two of the options not already opted for in Semester I, II and III.**

**M.A. (Economics) Semester – I**  
**Course Code: MECL-1171**  
**Microeconomics-I**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** examine the empirical validity of different theories and their policy implications.
- CO2:** recognize the importance of assumptions in laws and economics models.
- CO3:** recognize the role of ethical values in economic decisions.
- CO4:** understand the various aspects of demand for a particular product and theoretical consumer behaviour in the context of demand for a product and multiple products.
- CO5:** explain and calculate price elasticity of demand and other elasticities.
- CO6:** understand different concepts of cost structure of a firm in short run and long run.

**M.A. (Economics) Semester – I**  
**Session 2019-20**  
**Course Code: MECL-1171**  
**Micro Economics–I**

**Time: 3 Hours**

**Max. Marks: 100**  
**Theory: 80**  
**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**UNIT – I**

Basic Economic Problem – Choice and Scarcity; Deductive and Inductive Methods of Analysis; Role of assumptions in theory formulation; Positive and Normative Economics; Economic Models. Elasticities (Prices, cross, income) of demand – theoretical aspects and empirical estimation; elasticity of supply.

**UNIT – II**

Theories of demand – utility; indifference curve (Price, income and substitution effects, Hicks and Slutsky Substitution effect, Compensated Demand Curve) and their Applications; Revealed Preference Theory.

**UNIT – III**

Consumer's choice involving risk: describing risk, preference towards risk, the demand for risky assets; Consumer's behavior under asymmetric information; implications of asymmetric information, Market Signaling, moral hazard, managerial incentives in an integrated firm, Asymmetric information in labour markets–efficiency wage theory, recent development in demand analysis (linear Expenditure System).

**UNIT – IV**

Production function: Short period and long period; law of variable proportions and returns to scale; Isoquants – Least cost combination of inputs; Returns to scale; Economies of scale; Multiproduct firm; Elasticity of substitution; Euler's theorem; Technical progress and production; Cobb–Douglas, CES, Translog production function and their properties; Traditional and modern theories of cost - Derivation of cost functions from production function; (C–D and CES).

**Suggested Readings:**

1. Koutsoyiannis, A., Modern Microeconomics, (2nd Edition), Macmillan Press, London.
2. Dominik Salvatore, Microeconomics: Theory and Applications, Oxford University Press.
3. Ahuja H. L., Advanced Economics Theory: Micro Economics analysis.
4. Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
5. Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.



**M.A. (Economics) Semester – I**  
**Course Code: MECL-1172**  
**Macroeconomics-I**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand the generation of income and problems associated with it from macroeconomic point of view.

**CO2:** understand the consumption and investment behaviour of an economy and factor affecting consumption and investment decisions.

**CO3:** understand the mechanism of income and investment propagation in an economy and problems associated with it.

**CO4:** understand the problem of inflation, its causes, effects and solutions in an economy.

**M.A. (Economics) Semester – I**  
**Session 2019-20**  
**Course Code: MECL-1172**  
**Macro Economics–I**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA:20Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**UNIT – I**

National Income and Accounts: Concept of national income, **national Income and welfare**, Social Accounts and its uses. Classical and Keynesian Models of income determination, **wage price flexibility: classical & Keynesian View**.

**UNIT – II**

Consumption Function: Keynes psychological law of consumption; short-run and long-run consumption function; Empirical evidence on consumption function; income–consumption relationship–absolute income, relative income, life cycle and permanent income hypotheses.

**UNIT – III**

Investment Function: Keynesian Theory; the accelerator Theory; Neo Classical Theory (Jorgenson's Model), **Tobin Q Theory**

**UNIT– IV**

Money: Concept of money; Empirical definition of money, High powered money and money multiplier; Credit Creation by Banks, control of money supply. Classical and Keynesian approach to demand for money; Post–Keynesian approaches to demand for money – Patinkin and the Real Balances Effect, Approaches of Baumol and Tobin; Friedman and modern quantity theory.

**Suggested Readings:**

1. Beckerman, W.: An Introduction to National Income Analysis.
2. Branson, W.A., Macroeconomic Theory and Policy, (3rd ed.), Harper and Row, New York.
3. Shapiro, E., Macroeconomic Analysis, Galgotia Publications, New Delhi.

**M.A. (Economics) Semester – I**  
**Course Code: MECL-1453**  
**Quantitative Methods for Economists–I**

**Course Outcomes:**

**CO1:** Recognize the concept of functions and rules of differentiation and apply this to find out revenue, cost, demand, supply function, elasticity and their types.

**CO2:** Understand the rule of partial differentiation and interpretation of partial derivatives.

**CO3:** Manage to solve the problem related to maxima and minima in single and multivariable functions for application in market equilibrium.

**CO4:** Learn concepts of integration and its applications to consumer's surplus and producer's surplus.

**CO5:** Determine the solution of simultaneous equation through crammer's rule and understand the concept of quadratic forms, Eigen roots and Eigen vectors.

**CO6:** Recognize linear programming problem and its formulation and solution through graphical and simplex methods.

**CO7:** Well understanding the concept of duality, concept of a game, saddle point solution and its simple applications in economics.

**M.A. (Economics) Semester – I**  
**Session 2019-20**  
**Course Code: MECL-1453**  
**Quantitative Methods for Economists–I**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**UNIT– I**

Concept of function and its types ; Rules of differentiation; Application to revenue, cost, demand, supply functions; Elasticities and their types; production function; Rules of partial differential and interpretation of partial derivatives; homogeneous functions and Euler's theorem.

**UNIT– II**

Problem of maxima and minima in single and multivariable (upto 3) functions; Unconstrained and constrained optimization in simple economic problems; Simple applications in market equilibrium; Concept of integration; Simple rules of integration; Application to consumer's surplus and producer's surplus.

**UNIT– III**

Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule, Concept of matrix—their types, simple operations on matrices, matrix inversion and rank of a matrix; Concept of quadratic form, Eigen roots and Eigen vectors; Introduction to input–output analysis.

**UNIT– IV**

Linear Programming –Formulation and solution through graphical and simplex method. Statement of basic theorems of linear programming; Formulation of the dual of primal and its interpretation; Shadow prices and their uses; Concept of duality; Concept of a game; Strategies –simple and mixed; Value of a game; Saddle point solution; Simple applications.

**Suggested Readings:**

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Yamane, Taro (1975), Mathematics for Economists Prentice Hall of India, New Delhi.
4. Vygodsky, G.S. (1971), Mathematical Handbook (Higher Mathematics), Mir Publishers, Moscow.
5. Kothari, C.R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.
6. Mustafi, C.K. (1992), Operations Research : Methods and Practice, Wiley Eastern, New Delhi

**M.A. (Economics)**  
**OPT-I (Public Finance)**

**Course outcome:**

After passing this course students will be able to:

**CO1:** analyze the functioning of modern public finance.

**CO2:** understand the fiscal policy principles and demonstrate a good understanding of the fiscal framework for taxing and spending.

**CO3:** argue the theoretical basis of public expenditures and to analyze their types and economic effects.

**CO4:** classify public revenues and expenditures through the budget and to analyze the instruments and objectives of budgetary policy.

**CO5:** analyse critically tax reforms and policy choices in developed and developing countries.

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## MA (Economics)

### Session 2019-20 OPT-I: Public Finance

**Time: 3 Hours**  
**Theory: 80**

**Max. Marks: 100**

**CA: 20**

#### **Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

#### **Unit– I**

Meaning and scope of Public Finance, Role of Public Finance in developing countries. Distinction between public, private and merit goods.

Public revenue : sources, taxation, tax elasticity and buoyancy, taxable capacity and tax effort; Theory of incidence; equity in taxation; principles of taxation; direct and indirect taxes; effects of taxation on production and distribution; major taxes in India; tax reforms in India.

#### **Unit– II**

Public expenditure: structure and growth of public expenditure, reasons for growth in public expenditure; Wagner's law, **Peacock and Wiseman's hypothesis**; Effects of public expenditure on production and distribution; Role of public expenditure in developing countries.

#### **Unit– III**

Public budgets: kinds of budget, programme budgeting and zero-base budgeting; different concepts of budget deficits, budget of Union Government in India.

Public debt: classification, significance and burden of public debt, principles of debt management, external debt servicing, Public debt in India.

#### **Unit– IV**

Fiscal federalism – theory and problems. Criteria for resource transfer from Union to States, Centre-State financial relations in India, recommendations of the latest Finance Commission.

Fiscal policy– objectives, interdependence of monetary and fiscal policies.

#### **Suggested Readings:**

1. Musgrave, R.A. , The Theory of Public Finance, McGraw Hill, Kogakusha, Tokyo.
2. Chelliah, Raja J. , Fiscal Policy in Underdeveloped Countries, George Allen and Unwin, London.
3. Srivastava, D.K. (Ed.) (2000), Fiscal Federalism in India, Har-Anand Publications Ltd., New Delhi.
4. Government of India (1992), Reports of the Tax Reforms Committee – Interim and Final (Chariman : Raja J. Chelliah).

**MA Economics**  
**OPT-II (Economics of Labour)**

**Course outcome:**

After passing this course students will be able to:

**CO1:** analyse labour market trends.

**CO2:** understand wage scheme and structure.

**CO3:** learn returns to schooling, on the job training, migration, employer sponsored health care and education.

**MA (Economics)**  
**Session 2019-20**  
**OPT-II: Economics of Labour**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit– I**

Nature, scope and subject matter of labour economics; Labour Market : Concept, characteristics, nature and characteristics and growth of labour markets in India. Theories of Labour markets: Classical, Neo-classical, Dualistic Labour Markets.

**Unit– II**

Employment and Unemployment – Concept, types and measurements; nature of unemployment in India, Employment policy in five year plans, Casualisation of employment in India, **Employment in organized and unorganized sector, MGNREGA Scheme** .

Wages: classical and neo-classical and bargaining theories of Wages. Concept of Wages –minimum wage, living wage and fair wages in India. Wages and productivity.

**Unit– III**

Trade Unions; Objectives and functions, Trade unions in India. Industrial Relations in India. Industrial Disputes – Causes and extent. Dispute settlement Machinery in India in the framework of Industrial Disputes Act.

**Unit– IV**

Social Security – social assistance, social insurance and social security policy in India. Labour Welfare: State policies with respect to labour welfare in India, **Labour Pension Scheme**, Labour market reforms in India, exit policy and measures to make labour market flexible; Second National Commission on labour. Globalization and labour markets.

**Suggested Readings:**

1. Datar, B.N. : Labour Economics
2. Dobb, Maurice : Wages
3. Dunlop J.T. (ed) : Theory of Wages Determination.
4. Government of India : Indian Labour Year Book, Labour Investigation Committee, Main Report, 1946. Report of the Fair Wages Committee, 1949, Report of the National Commission on Labour in India, 1969.
5. I.L.O. : Approaches to Social Society.
6. Pant, S.C.: Indian Labour Problems.
7. Papola, T.S., P.P. Ghosh and A.N. Sharma (Eds.) , Labour, Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
8. Sexena, S.R.: Labour Problems and Social Welfare.
9. Singh, V.B. : An Introduction to the Study of Labour Problems



**MA (Economics)**  
**OPT-III (Theory of Statistics)**

**Course outcome:**

After passing this course students will be able to:

- CO1:** understand the basic concepts and techniques for analysing data.
- CO2:** learn the fixed-sample and large-sample statistical properties of point and interval estimators.
- CO3:** identify whether a probability sampling method or a non probability sampling method was used to obtain the study data.
- CO4:** recognize the connection between theory and applications by appropriately fitting, assessing and interpreting the results/ outcomes.
- CO5:** understand the properties and uses of parametric and non-parametric testing procedures.

**MA (Economics)**  
**Session 2019-20**  
**OPT-III: Theory of Statistics**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit –I**

Axiomatic definition of probability, Chebychev's inequality, Baye's inequality, meaning of theoretical probability distributions; derivation of main properties of binomial, poisson, normal, gamma and beta distributions.

**Unit – II**

Meaning of sampling distribution of a statistic; desirable properties of point estimators; internal estimation; derivation of main properties of  $\chi^2$ , t and F distributions; maximum likelihood estimation (properties without derivation) and applications.

**Unit – III**

Basic concepts of hypotheses testing; tests of significance based upon Z,  $\chi^2$ , t and F distributions.

**Unit – IV**

Non-parametric tests (without derivations; stress on numerical examples): Ordinary sign test, Wilcoxon's signed rank test, test of randomness, Wald-Wolfowitz run test, Mann-Whitney test, Kruskal-Wallis test, Kendall's concordance test.

**Suggested Readings:**

1. Anderson, T.W. (1972), An Introduction to Multivariate Analysis, Wiley Eastern Pvt. Ltd., New Delhi.
2. Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winton, New York.
3. Goon, A.M., Gupta, M.K. and Das Gupta, B. (1977), An Outline of Statistical Theory Vols. I & II, The World Press Ltd., Calcutta.
4. Gujarati Damoder, N. (1995), Basic Econometrics, (3rd Edition), McGraw Hills, New York.
5. Hoel, P.G., Introduction to Mathematical Statistics, IIIrd Edition, Asia Publishing House, New Delhi.
6. Hogg, R.V. and Graig, A.T. (1989), Introduction to Mathematical Statistics (4th Edition), Maxwell Macmillan International Edition.
7. Hogg, R.V. and Tanis, E.A. (2001), Probability and Statistical Inference (6th Edition), Pearson Education, Asia.
8. Kapur, J.N. and Saxena, H.C. (1997), Mathematical Statistics (11th Edition), S. Chand & Co., New Delhi.
9. Lind, D.A., Marshall, W.C. and Mason, R.D. (2002), Statistical Techniques in Business and Economics (11th Edition), McGraw-Hill, New York.
10. Lindeman, R.H., P.F. Merenda and R.Z. Gold (1980), Introduction to Bivariate and Multivariate Analysis, Scott Foresman.
11. Miller, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
12. Mood, A.M., Graybill, F.A., and Boes, C., An Introduction to Theory of Statistics, McGraw Hill, Kogakusha.

13. J.Wichern, Applied Multivariate Statistical Analysis.
14. Walpole, R.E., Myers, H., Myers, S.L. and Ye, K. (2002), Probability and Statistics for Engineers and Scientists (7th Edition), Pearson Education, Asia

**MA Economics**  
**OPT-IV (Money, Banking and Finance)**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** understand several key models and concepts of monetary economics and banking theory.
- CO2:** demonstrate an understanding of nature and functions of money and the role of financial markets in the economy.
- CO3:** describe the structure of financial markets, the factors that shape them, and how they are regulated.
- CO4:** understand the role of banks in modern monetary economies and financial Intermediation.
- CO5:** understand the main policy challenges central banks face in choosing appropriate goals, instruments and targets in the conduct of monetary policy.
- CO6:** understand the role of money and monetary policy as determinants of the aggregate levels of national spending and income, output, employment and prices.
- CO7:** understand the main determinants of interest rates in bond and money markets.

**MA (Economics)**  
**Session 2019-20**  
**OPT-IV: Money, Banking and Finance**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit– I**

**Money:** Definition, functions, kinds of money, Inside and Outside money, Neutrality of money-Don Patinkin's, Meltzer's and Gurley and Shaw's analysis. Supply of money in India: concepts, Significance and Determinants, mechanics of money supply in India. Demand for Money: The traditional quantity theory; Fisher's equation of exchange; Cambridge cash balance approach. Keynesian, Friedman's and Neo-Keyensian theories of demand for money, empirical evidence.

**Unit– II**

**Financial System :** Commercial Banks: Systems, Theories of banking, Portfolio behaviour, Innovative banking, Credit creation, Role in economic development. Non-Bank Financial Intermediaries (NBFI's), Credit creation by NBFI's and monetary policy. Development banking and its lending activities with special reference to India;

**Unit– III**

**Banking in India;** Structure of Commercial Banks; Regional Rural Banks (R.R.B.'s); Cooperative Banks, Nationalisation of banks in India: Banking Sector reforms.

**Central Banking:** Functions with special reference to developing countries, Monetary policy: Objectives, Targets and Indicators. Transmission Mechanism, Lags in Monetary policy; Reserve Bank of India, limitations of RBI.

**Unit– IV**

**Rate of Interest:** Determination; Theories of the term structure of interest rates, Nature and Structure of interest rates in India; Money and Capital markets: Structure, Treasury Bills Market, Call money market and an Stock markets in India (Introductory), Mutual Funds (concept), Dichotomy in Indian money market; Interest rate policy in India: Recent developments; Financial sector reforms (recent developments).

**Suggested Readings:**

1. Thorn, Richard S., (1976), Introduction to Money and Banking, New York, Harper & Row.
2. Lockett, D.G., (1976), Money and Banking, McGraw Hill, New York.
3. Ritter, L.S. and Sibley, W.L., (1977), Principles of Money, Banking and Markets, Basic Books, New York, 3rd ed.
4. Laidler, D.E.W. (1972), The Demand for Money, Theories and Evidence, Allied Publisher, Delhi.
5. Bhole, L.M., (1998), Financial Institutions and Markets Structure, Growth and Innovations, 2nd ed.
6. Reserve Bank of India (1985), Report of the Committee to review the working of the Monetary System.
7. Reserve Bank of India (1991), Report of the Committee on the Financial System (Narasimha Committee Report).

**MA Economics**  
**OPT-V (Industrial Economics)**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand basic models of the behaviour of firms and industrial organization.

**CO2:** explain the costs and benefit analysis –Net Present Value and Internal rate of return criteria .

**CO3:** effectively communicate the structure, concept and organization of a firm – ownership, control and objectives of the firm .

**CO4:** discuss productivity, efficiency and capacity utilization – concept and measurement including evidence from Indian economy.

**CO5:** critically examine the Industrial policy in India – evolution and paradigm shift, recent trends in Indian Industrial growth.

**CO6:** discuss the various methods of evaluating investment expenditure, mergers and acquisitions.

**MA (Economics)**  
**Session 2019-20**  
**OPT-V: Industrial Economics**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit– I**

**Framework and Problems of Industrial Economics:**

Concept and organization of a firm – ownership, control and objectives of the firm; Passive and active behaviour of the firm.

**Market Structure:** Sellers' concentration; Product differentiation; Entry conditions; Economies of Scale; Market structure and innovation; Theories of industrial location – Weber and Sargent Florence; Factors affecting location.

**Unit– II**

**Market Conduct:** Product Pricing - Theories and evidence; Investment expenditure – Methods of evaluating investment expenditure; Mergers and Acquisitions; diversification.

**Market Performance:** Growth of the firm – Theory and evidence; Constraints on firm's growth; Productivity, efficiency and capacity utilization – Concept and measurement including evidence from Indian Economy.

**Unit– III**

**Indian Industrial Growth and Pattern :** Industrial Policy in India – evolution and paradigm shift; Recent trends in Indian industrial growth; MNCs, transfer of technology and issues related with TRIMS; Privatization: Forms and global and Indian evidence; Regional industrial growth and concentration in India; economic concentration and remedial measures; Issues in Industrial proliferation and environmental preservation.

**Unit– IV**

**Project Appraisal :** Cost benefit analysis – Net Present Value (NPV) and internal rate of return (IRR) criteria – balancing private and social returns.

**Industrial Labour :** Structure of industrial labour; Globalization and labour; Exit Policy and safety nets.

**Suggested Readings:**

1. Hajela, F.D. (1998), Labour Restructuring in India : A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.
2. Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000), The Unorganized Sector: Work Security and Social Protection, Sage Publications, New Delhi.
3. McConnel, C.R. and S.L. Brue (1986), Contemporary Labour Economics, McGraw-Hill, New York.
4. Papola, I.S., P.P. Ghosh and A.N. Sharma (Eds.) (1993), Labour Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
5. Rosenberg, M.R. (1988), "Labour Market in Low Income countries", in H.B. Chenery and T.N. Srinivasan (eds.) The Handbook of Development Economics, North-Holland, New York.
6. Venkata Ratnam, C.S. (2001), Globalization and Labour Management Relations : Dynamics of Change, Sage Publications Response Books, New Delhi.
7. Chadha, V. and G.S. Bhalla (1999), Industrial Development in India: The Post-Reform Scene, Kalyani Publishers, New Delhi.

**MA Economics**  
**OPT-VI (History of Economic Thought)**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand key models and concepts of the history of economic thought.

**CO2:** understand scholarly articles concerned the history of economic thought.

**CO3:** produce simple appreciations of the history of economic thought texts.

**CO4:** have a historical consciousness of economic ideas.

**CO5:** understand the development of economic thought in the context of the evolving global economy.

**CO6:** identify the development of economic thought from a historical perspective.

**CO7:** identify how economic theory has developed as a result of the evolution of economic thought.



**MA (Economics)**  
**Session 2019-20**  
**OPT-VI: History of Economic Thought**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit – I**

**Mercantilism:** Its origin and content - economic ideas of Petty, Cantillon, Locke and Hume.  
**Physiocracy:** Natural order, primacy of agriculture, social classes and circulation of wealth.

**Unit – II**

**The Classical System:** Adam Smith- Division of Labour, theory of value and distribution, economic growth and international trade; David Ricardo- Theory of value and distribution, foreign trade, economic development and theory of rent; T.R. Malthus- Theory of Population, theory of gluts; J.S. Mill- Laissez faire and protection; J.B. Say- Law of Markets; Karl Marx: dynamics of social change, theory of value and surplus value, theory of capitalist competition.

**Unit – III**

**The Marginalists and Neo-Classicism:** Precursors to marginalism- Gossen, Jevons, Menger and Walras; The Austrian School- Wiser and Bohm-Bawerk: Theory of capital and distribution; K. Wickseil and the Swedish School; Wicksteed on laws of distribution; The American Contribution: Clark, Walker and Schumpeter on the theory of growth and business cycles; Marshallian Economics: Price determination and elasticities, consumer surplus, costs and economies, rent and profit.

**Unit – IV**

**Keynes and Post Keynesian developments:** Marginal efficiency of capital and investment, theory of wages and interest, underemployment equilibrium and the role of fiscal policy, theory of multiplier and business cycles; Post Keynesian developments in consumption function, quantity theory of money, inflation, business cycles and economic growth.

**Suggested Readings:**

1. Hanley, L.H. : History of Economic Thought, 1949.
2. Blaug, M. : Economic Theory in Retrospect, 1968.
3. Schumpeter, J.A. : History of Economic Analysis, 1954.
4. Spiegel, H.W. : The Growth of Economic Thought, 1971.
5. Roll, E. : A History of Economic Thought, 1956.
6. Friedman, M. : A Theory of Consumption Function, 1957.
7. Hicks, J.R. : A Contribution to the Theory of Business Cycles, 1960.
8. Domar, E. : Essays in the Theory of Economic Growth, 1957.
9. Gide, C. and C. Rist : A History of Economic Doctrines, 1948.

**MA Economics**  
**OPT-VII (Economics of Socialism)**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** understand different types of economic system like capitalism, socialism and mixed economy.
- CO2:** understand the process of socialism, its crisis and problem of socialistic economy.
- CO3:** learn the Marxian theory of surplus.
- CO4:** learn different forms of planning, resource allocation in Planning and relevance of balanced approach and unbalanced approaches of planning.
- CO5:** understand the pricing, consumption, management decision in industry and agriculture.
- CO6:** understand international economic relations among socialistic and developing countries.

**MA (Economics)**  
**Session 2019-20**  
**OPT-VII: Economics of Socialism**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two from each of four unit (I-IV). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each unit. The fifth question may be attempted from any unit. .

**Unit – I**

Economic system; meaning and features; Distinguishing features of different economic systems pre-capitalist, capitalism, socialism and mixed economy.

**Unit – II**

Marxian Theory of surplus value, crisis, breakdown and socialism, Pre-requisites, Problems and processes of socialist transformation, Economic problems of socialist economies.

**Unit – III**

Organizational forms of planning, indicators of planning, development priorities and resource allocations. Balance approach; inter-sectoral and inter-regional balances.

**Unit – IV**

Pricing, consumption, management of industry and agriculture, International economic relations between socialist and developing economies; breakdown of socialist system.

**Suggested Readings:**

1. Lavinge, M., Socialist Economies of Soviet Union and Europe.
2. Lange, O., Political Economy, Vols. I and II (relevant portions).
3. Leontive, L., A Short Course of Political Economy.
4. Willzynski, J., Economics Theory of Socialism.
5. Lange, O. & Taylor, F.M., Economics Theory of Socialism (1964, First Edition).
6. Nova, A., Soviet Economy (Third Edition).
7. Nova, A., Socialist Economies (1975), Nutti, D.M. (ed.).
8. Dobb, M., On Economics Theory of Socialism, 1965.
9. Halzman, F. (ed.), Readings in Soviet Economy.

**MA Economics**  
**OPT-VIII (Econometrics)**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand the nature and methodology of econometrics.

**CO2:** understand the basic procedure of estimation of model and problems associated with it.

**CO3:** understand basic properties of time series and panel data.

**Session 2019-20**  
**OPT-VIII: Econometrics**

**Time: 3 Hours**  
**Theory: 80**

**Max. Marks: 100**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit – I**

Nature, meaning and scope of econometrics; Simple and general linear regression model – Assumptions, estimation (through OLS approach) and properties of estimators; Gauss-Markov's theorem (Two variable and k-variable); Concepts and derivation of  $R^2$  and adjusted  $R^2$ .

**Unit – II**

Concept of analysis of variance approach and its applications in regression analysis. Nature, test, consequences and remedial steps of the problems of hetero-scedasticity and multi-collinearity.

**Unit – III**

Nature, test, consequences and remedial steps of the problem of auto-correlation; Concepts of stationarity, random walk model, unit roots (Dickey-Fuller test and Augmented Dickey-Fuller test), Cointegration, Causality analysis (Granger and Sim's test).

**Unit – IV**

Introduction to panel data models: Fixed effect and random effect models; Dummy variables technique: Alternative applications – Testing structural stability of regression models, comparing two regression equations, interaction effect, seasonal analysis.

**Suggested Readings:**

1. Gujarati, D.N, Basic Econometrics ,McGraw Hill, New Delhi.
2. Koutsoyiannis, A, Theory of Econometrics, The Macmillan Press Ltd., London.
3. Maddala, G.S. (Ed.), Econometric Methods and Applications (2 Vols.) Aldershot U.K.

## **OPT-IX: Economics of Agriculture**

### **Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand the various theories of agriculture economics.

**CO2:**analyse trends in production, productivity in green revolution and post green revolution era.

**CO3:** understand food security problem at national and international level.

**CO4:** learn the impact of WTO on agriculture

**Session 2019-20**  
**OPT-IX: Economics of Agriculture**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit I**

**Basic Agricultural Economics** – Production functions in agriculture; Input-input and product-product relationship; Inter-sectoral linkages of agriculture (Backward, forward, linkages and feed-back effect). Models of agricultural development – Lewis, FEI-Ranis, Gorgeuson's, Mellor, Schultz and Boserp's model.

**Unit II**

**Basic Inputs** – Irrigation, HYV seeds, mechanization, distribution mechanism of inputs; Newagricultural strategy and its impact on employment and income distribution.  
Food security and international trade, concept, threat, indicators and mechanism to food security. Food assistance programme (Domestic and International).

**Unit III**

**Institutional Structure** – Nature of emerging agrarian structure – co-operative farming and itsevaluation with reference to productivity, employment and income distribution, Environment andsoil erosion, sustainable development.  
Organic farming– meaning, techniques of organic farming and its scope in India.

**Unit IV**

**Marketing and Prices** – Nature of supply and demand for agricultural products; income andprice elasticity of demand and supply, agriculture marketing in India, rationale for stateintervention; agricultural price policy (recent).  
Terms of trade between agriculture and industry.  
Main features of International trade in Agri-products.  
WTO – subsidies and Indian agriculture.

**Suggested Readings:**

1. Southworth, H.M. and Johnston, B.F. (ed.) (1967), Agricultural Development and Economic Growth.
2. Dantwala, M.L. (1986), Agricultural Growth India, I.S.A.E.
3. Schultz, T.W. (1964), Transforming Traditional Agriculture.
4. Mellor, J.W. (1960), The Economics of Agriculture Development.
5. Dasgupta, B. (1980), The New Agricultural Technology in India, Mcmillan.
6. Bhalla, G.S. and Tyagi, D.S. (1989), Patterns in Indian Agricultural Development, RSID
7. Kaur Rajbans, Agriculture Price Policy in Economic Development.
8. Kahlon, A.S. (1984), Pricing Policy in India
9. Bansal, P.C. (1981), Agricultural Problems of India.
10. Economic and Political Weekly, Regular Features on Review of Agriculture.

## **OPT-X (Economics of Public Enterprises)**

### **Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand the role of public sector in economic development, objectives scope and growth of public sector in India.

**CO2:** compare the features, merits and demerits of different forms of public enterprises.

**CO3:** understand the management of public enterprises and personnel management in public enterprises.

**CO4:** explain the costs and benefit analysis –Net Present Value and Internal rate of return criteria.

**CO5:** discuss the role of bureau of public enterprises and special committees on Public enterprises.

**CO6:** understand auditing of public enterprise, accountability of public enterprises



**Session 2019-20**  
**OPT-X: Economics of Public Enterprises**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit– I**

Role of Public Sector in economic development. Objectives, scope and growth of public sector in India. Cost-benefit analysis, shadow prices, social rate of discount, practical approaches in project selection.

**Unit– II**

Organisational Pattern of public enterprises. Management of Public enterprises: Personal Management in Public Enterprises, Financial management in Public enterprises.

**Unit– III**

Evaluation of performance of public enterprises, Measurement of efficiency in public enterprises, Pricing Policy of Public Enterprises. **Public sector reforms and privatization strategies.**

**Unit– IV**

Accountability of Public Enterprises, Relationship with the government, Auditing of Public Enterprises. Role of Bureau of Public Enterprises, Special Committees in Public Enterprises. Case study of public sector steel industry in India-growth performance, pricing and management.

**Suggested Readings:**

1. Institute of Public Enterprises, Pricing and Investment in Public Enterprises Lavinge, M., Socialist Economies of Soviet Union and Europe.
2. Khera, S.S., Management and Control in Public Enterprises.
3. Sinha, J.B.S., Some Problems of Public Sector Organisation.
4. Sharma, B.S., Financial Planning in Indian Public Sector.
5. Government of India, Annual Reports on the Industrial and Commercial Undertakings of Central Government.
6. Narayan Laxmi, Principles and Practices of Public Enterprises Management.
7. Aggarwal, G.C., Public Sector Steel Industrial in India

**Course Code: MECM- 1125 (OPT- XI)**  
**Computer Applications for Economists**

**Course Outcomes:**

After passing this course the student will be able to:

**CO1:** understand the organisation of Computer System and functioning of various units

**CO2:** make use of I/O statements, control statements, looping, arrays and library functions in C programming

**CO3:** understand Number systems, conversion from one number to another and floating point arithmetic

**CO4:** make use of word processing and spreadsheet software

**CO5:** make use of I / O statements, control statements, looping, arrays and library functions

**CO6:** solve simple problems using C programming

**Session 2019-20**  
**Course Code: MECM- 1125 (OPT - XI)**  
**Computer Applications for Economists**

**Time: 3+3 Hours**

**Max. Marks: 100**

**Theory: 50**

**Practical : 30**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section .

**Unit– I**

Introduction to Computers: What is Computer and its applications?

Computer Organization: Input/output unit, memory unit, control unit.

Input Unit: (Input devices and functions: Keyboard, Joystick, Mouse, Light Pen, MagneticTape, Magnetic Disks, Floppy Disk, OMR (Optical Mark Reader), Optical Character Reader(OCR), Punch Cards.

Output Unit: (Output devices and functions: Visual Display Unit (Monitor), LCD and LED, Plotters, Printers, CTD.

**Unit– II**

Data Representation: Introduction to Number System: Binary system, Octal number system, Hexadecimal number system, Decimal number system.

Converting from one number to another number: Converting to binary from octal, converting to octal from binary, converting to decimal from binary, octal, hexadecimal, converting to binary from hexadecimal, converting to hexadecimal from binary.

Floating Point Arithmetic: Addition, Subtraction, Multiplication, Division of Floating Point.

**UNIT -III**

MS Word: Overview, Creating, Saving, Importing, Exporting and Inserting Files, Formatting pages, Paragraphs and Sections, Indents and Outdents, Creating lists and numbering, Heading, Styles, Fonts and font size, Editing, Positioning and Viewing texts, Finding and replacing text, Inserting page breaks, Page numbers, Book marks, Symbols and dates using tabs and tables, Header, footer and printing.

MS Excel: Worksheet Overview, Entering information, Worksheet Creation, Opening and Saving, Workbook, Formatting numbers and texts, Protecting cells, Producing Charts and Printing Operations.

**UNIT -IV**

Introduction to ‘C’ Language: ‘C’ character set, data types; Constants and variables, assignment statement; Expression.

Input-Output Statement: Scanf, printf, Library functions.

Control structures; Decision making and Loop statements.

Use of Arrays, String and String functions.

**Suggested Readings:**

1. Gurminder Singh, Rashpal Singh: P.C. Computing Kalyani Publishers.
2. BPB Publishers: Complete Reference M.S. Office.
3. Saxena: First Course in Computer.
4. K.S. Kahlon, Rashpal Singh, Gurminder Singh: Programming in 'C' Kalyani Publishers.
5. Yashwant Kanitkar: Let us 'C'.
6. R.S. Salaria: Programming in 'C'.
7. Ravi Chandran: Programming in 'C'.

**MA Economics**  
**OPT-XII: Operations Research**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** gain proficiency with tools from optimization techniques like advanced linear programming, transportation, queuing models and assignment problems.
- CO2:** understand and propose the best strategy among various strategies of game theory under uncertainty.
- CO3:** understand the basic replacement models to maximise firms profit or minimize losses.
- CO4:** use CPM and PERT techniques, to plan, schedule, and control project activities.

**M.A. (Economics)**  
**Session 2019-20**  
**OPT- XII: Operations Research**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit – I**

Definition, significance, scope and limitations of operations research. Linear Programming: Assumptions, formulation and solution by graphic method, simplex and two phase simplex method.

**Unit – II**

Transportation Problems, Assignment Problems. Game Theory: Competitive games, Pure strategy, by Dominance, Mixed strategy ( $2 \times 2$ ,  $m \times 2$  and  $2 \times m$ ), Two persons zero sum games, 'n' persons zero sum games, Solution of Game problems with Linear Programming.

**Unit – III**

Queuing Models: Characteristics Single channel Queuing models:

Model I (M/M/I): (FCFS/∞/∞)

Model II (M/M/I): (SIRO/ ∞/∞)

Model III (M/M/I) (FCFS/N/∞) – (Finite Queue Length Model)

Model IV (M/M/I): (FCFS/n/N) - (Limited Source Model)

Inventory Model with Deterministic Demand and Probabilistic Demand.

**Unit – IV**

Replacement models of items that deteriorate (money value constant and changes), For items that fail suddenly (Individual replacement policy and Group replacement policy) Project Scheduling by PERT and CPM

**Suggested Readings:**

1. Wagner, H.M. (1973), Principles of Operations Research with Applications to Managerial Decisions.
2. Levin, R.I. and Kirk Patrick, C.A., (1978), Quantitative Approaches to Management.
3. Hartley, R.V., (1976), Operations Research : A Managerial Emphasis.
4. Hardy, A. Taha, (1976), An Introduction to Operations Research, 2nd ed.
5. Gauss, F., Linear Programming.
6. Kambo, N.S., Mathematical Programming Techniques.

## **MA Economics**

### **OPT-XIII: Economics of Environment and Demography**

#### **Course Outcomes:**

After passing this course students will be able to:

**CO1:** analyse trends in population growth rate, death rate, birth rate, and urbanisation.

**CO2:** understand various theories of population growth.

**CO3:** learn the causes and consequences of population growth on different aspects.

**MA (Economics)**  
**Session 2019-20**  
**OPT-XIII: Economics of Environment and Demography**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit – I**

Environment-economy-population linkage, environment as a public good, common property resources. Environmental Economics and Ecological Economics Environmental benefits – use value and non-use values, methods of measurement, costs of environmental protection, environment and development trade-off, sustainable development, neo-classical and ecological views, integrated environmental and economic accounting.

**Unit – II**

Environmental policies, Pigouvian taxes and subsidies, marketable pollution permits, Coase theorem, environmental regulations – command and control, incentive based, promoting clean technology, energy policy. Global issues – poverty, population and environment, global agreements, trade and environment under WTO regime.

**Unit – III**

Demography and its concepts, population and economic development, theories of population – Malthus, optimum theory, theory of demographic transition. Factors affecting fertility, nuptiality-concept and analysis, mortality-concepts and factors affecting, Concept of Gender Issues.

**Unit – IV**

Population policy in India – shift in population control to family welfare to women empowerment, population and human development issues, new population policy, tasks before National Population Commission.

**Suggested Readings:**

1. Kolstad, C.D. (1999), Environmental Economics, Oxford, New Delhi.
2. Goodstein, E.S. (2002), Economics and the Environment, John Wiley, New York.
3. Bhattacharya, R.N. (ed) (2001), Environmental Economics : An Indian Perspective, Oxford, New Delhi.
4. Sengupta, R.P. (2001), Ecology and Economics : An Approach to Sustainable Development, Oxford, New Delhi.
5. Kadekodi, G.K. (2004), Environmental Economics in Practice, Oxford, New Delhi.
6. Bogue, D.J. (1971), Principles of Demography, John Wiley, New York.
7. Novell, C. (1988), Methods and Models in Demography, Bellhaven Press, London.
8. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.
9. Simon, J.L. (1992), Population and Development in Poor Countries, Princeton University Press.
10. Bose, A (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
11. Agarwala S.N. (1972), India's Population Problem, Tata McGraw-Hill, Bombay.
12. Chaubey, P.K. (2000), Population Policy in India, Kanisha Publications, New Delhi.



**MA Economics**  
**OPT-XIV: Economics of Infrastructure**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** understand the relevance of infrastructure in economic development of country.
- CO2:** understand key issues and problems with respect to regulation, governance and policies for the infrastructure sector.
- CO3:** apply key principles, concepts and tools relevant to the economic regulation of infrastructure industries.
- CO4:** explain how infrastructure solutions affect society, environment, and health.
- CO5:** apply this knowledge to the analysis of specific energy issues and policies in India.
- CO6:** understand the concepts of Cost- Benefit analysis and its application in the transport sector.
- CO7:** analyse different government policies for regulation and reform of the infrastructure sector.

**MA (Economics)**  
**Session 2019-20**  
**OPT-XIV: Economics of Infrastructure**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit – I**

Infrastructure and economic development – Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load, Off-peak load problem, Dual principle controversy; Economies of scale of joint supply.

**Unit – II**

The structure of transport costs and location of economic activities. Demand for transport models of freight and passenger demand. Cost functions in the transport sector. Principles of pricing. Special problems of individual modes of transport; Inter-model condition in the Indian situation. Rate-making in telephone utilities. Principles of decreasing costs in telephone industry.

**Unit – III**

Primacy of energy in the process of economic development. Factors determining demand for energy; Effect of energy shortages. Energy conservation, Renewable and non-conventional sources of energy, Energy modelling, Energy policy in the Indian context. Bulk supply and pricing of electricity. The relative economics of thermal, hydel and nuclear power plants. National power grid. Financing water utilities. Urban and rural water supply. The exploitation of natural gas. Pricing problem.

**Unit – IV**

Organization and financing of supply of social services. Private vs. public sector financing; Recent debate about the fixation of prices of social services. Development of social services in the successive Indian plans. Education and economic growth. Approaches to education planning. Social demand. Rate of return and manpower balance approaches. The case for universal and free primary education; Structure of higher education and problems of its financing in India; Human resources and human capital development. The issues in education policy; Health dimensions of development; Determinants of health – poverty, malnutrition, illiteracy and lack of information; Economic dimensions of health care – Demand and supply of health care; Financing of health care and resource constraints; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery.

**Suggested Readings:**

1. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
2. Centre for Monitoring Indian Economy (1996), India: Energy Sector, CMIE, Mumbai.
3. Eckstein, O. (1958), Water Resource Development, Harvard University Press, Cambridge.
4. Fariss, M.T. and R. Sampson (1975), Public Utilities, Houghton Mifflin, Boston.
5. Goyal, S.K. (Ed.) (1985), Public Enterprises, Indian Institute of Public Administration, New Delhi.
6. Jha, R., M.N. Murty and S. Paul (1990), On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.
7. Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure, Vol. VI, New Delhi.
8. McMohan, W.W. (1999), Education and Development : Measuring the Social Benefits, Oxford University Press, Oxford.

9. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report : Policy Implications for Growth and Welfare, NCAER, New Delhi.
10. Norton, H.S. (1971), Modern Transport Economics, C.E. Merrill, London.
11. Panchamukhi, P.R. (1980), Economics of Health : A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
12. Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.
13. Parikh, K.S. (Ed.) (1999), India Development Report – 1999-2000, Oxford, New Delhi.
14. Phillips, A. and O.E. Williamson (Eds.) (1967), Prices : Issues in Theory, Practice and Public Policy, University of Pennsylvania Press, Philadelphia.
15. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.
16. Turvey, R. and D. Anderson (1977), Electricity Economics, John Hopkins University Press, Baltimore.
17. Woodhall, M. (1992), Cost Benefit Analysis in Educational Planning, UNESCO, Paris.

**M.A. (Economics) Semester – II**  
**Course Code: MECL-2171**  
**Microeconomics-II**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand the production decisions of a producer in the context of inputs and different market structures.

**CO2:** understand the concept and importance of game theory and competitive strategies in understanding the behaviour of oligopolies.

**CO3 :** understand the concept of welfare economics and measurement of social welfare.

**CO4:** understand the contrast between public and private goods.

**CO5:** understand the concept of free riders.

**CO5:** recognize the market fails to efficiently allocate resources in presence of externalities, monopoly and imperfect information.

**M.A. (Economics) Semester – II**  
**Session 2019-20**  
**Course Code: MECL-2171**  
**Microeconomics-II**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**  
**Note: Instructions for the paper-setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit I**

Perfect Competition: Short run and long run equilibrium of the firm and industry, price and output determination, supply curve. Monopoly – short run and long run equilibrium, price discrimination, inter-temporal price discrimination and peak-load pricing, monopoly control and regulation; Monopolistic competition – General and Chamberlin approaches to equilibrium, equilibrium of the firm and group with product differentiation and selling costs, excess capacity under monopolist competition, criticism of monopolistic competition.

**Unit II**

Oligopoly – Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, Kinked demand curve and Stackelberg's solution) and collusive (Cartels and Mergers, price leadership and basing point price system) models; Price and output determination under monopoly and bilateral monopoly.

**Unit III**

Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise; Full cost pricing rule, limit pricing theory. Game theory and competitive strategy : dominant strategies and Nash equilibrium.

Neo-classical approach – Marginal productivity theory; Modern Theory of distribution.

**Unit IV**

Pigovian welfare economics; Measurement of social welfare, Pareto optimal conditions; Perfect competition and Pareto optimality; Compensation principle; Social welfare function : Burgeson's criterion, grand utility possibility frontier and welfare function; market failure, externalities and property rights, public goods, incomplete information; Theory of Second Best, Arrow's impossibility theorem; Partial and General Equilibrium

**Suggested Readings:**

1. Koutsoyiannis, A., Modern Microeconomics, (2nd Edition), Macmillan Press, London.
2. Dominik Salvatore, Microeconomics: Theory and Applications, Oxford University Press.
3. Ahuja H. L. "Advanced Economics Theory: Micro Economics analysis".

**Course Code: MECL-2172**  
**Macroeconomics-II**

**Course Outcomes:**

After studying this course, students will:

- CO1:** be able to understand the Basic framework of IS-LM mechanism and its extended version. Students will also be able to evaluate monetary and fiscal policies using this framework.
- CO2:** have in-depth knowledge of Phillips curve and its different approaches.
- CO3:** be able to understand the basic theories of inflation and its solutions.
- CO4:** be able to understand features and working of important growth models.
- CO5:** be able to understand the working open economy and will learn how to achieve equilibrium through monetary and fiscal policies.
- CO6:** be able to understand the basic features of and working of new classical and new Keynesian models.

**Session 2019-20**  
**Course Code: MECL-2172**  
**Macroeconomics-II**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note : Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**UNIT– I**

**Neo–classical and Keynesian Synthesis:** The IS–LM model; Extension of IS–LM model with government sector, labour market and flexible prices, General Equilibrium in Open Economy: Mundell–Fleming approach in fixed and flexible Exchange rate system, Shapes of IS-LM in open economy. Relative effectiveness of monetary and fiscal policies in closed and open economy.

**UNIT– II**

**Theory of Inflation :** Classical, Keynesian and Monetarist approaches; Structuralist theory of inflation; Philips curve analysis – Short run and long run Philips curve; Natural Rate of Unemployment hypothesis; Adaptive expectations and rational expectations; Policies to control inflation.

**UNIT– III**

**Business Cycles:** Theories of Schumpeter, Kaldor, Samuelson, Hicks and Goodwin's model; Control of business cycles.

**UNIT– IV**

**New classical Economics:** Rational Expectation Hypothesis, Random Walk, Real Business cycle theory.

**New Keynesian Economics:** Sticky wage prices, Efficiency Wage models, Insider-Outsider Model.

**Suggested Readings:**

1. Ackley G. , Macroeconomics : Theory and Policy, Macmillan, New York.
2. Richard T. Froyen, Macroeconomics : Theory and Policies.
3. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.

**Course Code: MECL-2453**  
**Quantitative Methods for Economists-II**

**Course Outcomes:**

After passing this course students will be able to:

- CO1:** understand the basic concepts and techniques for analysing data.
- CO2:** recognize the connection between theory and applications by appropriately fitting, assessing and interpreting the results/ outcomes.
- CO3:** develop statistical approach and thinking among students to problem solving on a diverse variety of disciplines.



**Session 2019-20**  
**Course Code: MECL-2453**  
**Quantitative Methods for Economists-II**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**UNIT– I**

Meaning, assumptions and limitations of a simple correlation and regression analysis; Pearson's product moment and Spearman's rank correlation coefficients and their properties; Concept of the least-square technique and the lines of regression; Standard error of estimate; Partial and multiple correlation and regression (applications only).

**UNIT– II**

Analysis of Time Series: Definition, components of time series, measurement of trend by different methods, measurement of seasonal variations.

Methods of estimation of non-linear equations – parabolic, exponential, modified Exponential and logistic Curves.

**UNIT– III**

Deterministic and non-deterministic experiments; Various types of events; Classical and empirical definitions of probability; Laws of addition and multiplication; Conditional probability and concept of independence; Baye's theorem and its applications; Elementary concept of random variable; Probability, mass and density functions; Expectation, Properties (without derivations) of binomial, Poisson and normal distributions.

**UNIT– IV**

Basic concepts of sampling – random and non-random methods of sampling; Concept of an estimator and its sampling distribution; Concepts of statistical hypotheses – Null and alternative : level of significance; Type-1 and Type-2 errors; Confidence interval; Hypothesis testing in respect of means and proportions.

**Suggested Readings:**

1. Gupta, S.C: Fundamentals of Statistic, Himalaya Publishing House, 7th Edition, 2018, Delhi
2. Gupta, S.P: Statistical Methods, Sultan Chand & Sons, 43rd Edition, 2014, Delhi
3. Gupta C B, Gupta V, "An Introduction to Statistical Methods", 23rd Edition (1995), Vikas Publications
4. Kapoor, V.K and Gupta, Mathematical statistics.
5. Levin, Richard and David S. Rubin. "Statistics for Management". 7th Edition, Prentice Hall of India, New Delhi..
6. Spiegel, Andrew F, Practical Business Statistics. International Edition, 5th Edition, McGraw Hill Irwin.

**M.A. (Economics) Semester - III**  
**Session 2019-20**  
**Course Code: MECL-3171**  
**Course Title: Economics of Development**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** demonstrate the understanding of difference between growth and development.

**CO2:** understand the concept of sustainable economic development and its importance.

**CO3:** analyze different indices of economic development and the sources and obstacles to economic development.

**CO4:** understand major growth theories and models.

**CO5:** understand the significance of agriculture, foreign trade and investment in economic development

**M.A. (Economics) Semester - III**  
**Session 2019-20**  
**Course Code: MECL-3171**  
**Course Title: Economics of Development**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit I**

Economic growth and economic development – Meaning and measurement. Concept of sustainable development. Human Development Index and Physical Quality of Life Index (PQLI). Obstacles to economic development, Sources of economic growth, Growth and Income Distribution : The Kuznets Hypothesis.

Growth models – Harrod-Domar, Solow, Meade, Joan Robinson, Kaldor.

**Unit II**

Theories of Development – Classical, Marxian, Schumpeter, Stage theory.

Approaches to Development – Myrdal's theory of circular causation, Social Dualism, Technological Dualism, Models of Dualistic growth (Lewis, Ranis and Fei and Jorgenson models).

**Unit III**

Strategies of development: Big push, Balanced growth, Unbalanced growth, Critical minimum efforts thesis, Low level equilibrium trap, Dependency theory.

Agriculture and economic development.

**Unit IV**

Trade and development, two-gap theory, import substitution vs. export-led strategies. Role of capital formation, internal and external sources of capital formation, human capital formation and economic development, Role of foreign capital in economic development: developmental aid, FDI, MNCs.

**Suggested Readings:**

1. Shrivastava O S, Economics of Growth Development and Planning.
2. Thirlwall, A.P, Financing Economic Development, Macmillan, London.
3. Todaro, M.P., Economic Development in Third World, Orient Longman, Hyderabad.
4. Lekhi R.K and Joginder Singh, The Economics of development and planning, Kalyani Publisher

**M.A. (Economics) Semester – III**  
**Session 2019-20**  
**Course Code: MECL-3172**  
**Course Title: International Economics-I**

**Course outcome:**

After passing this course students will be able to:

**CO1:** analyze economic relationship between countries, covering trade.

**CO2:** understand international trade theory and policies

**CO3:** answer no. of questions such as;

-Why do countries trade with each other.

-What are effects of trade on welfare and income distribution

-What are the effects of various barriers to trade.

## **M.A. (ECONOMICS) SEMESTER – III**

**Session 2019-20**

**Course Code: MECL-3172**

**Course Title: International Economics-I**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

### **Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

### **Unit – I**

The pure theory of international trade – theories of absolute advantage, comparative advantage and opportunity costs, modern theory of international trade; Theorem of factor price equalization; Empirical testing of theory of absolute cost and comparative cost – Heckscher-Ohlin theory of trade.

### **Unit – II**

Kravis and Linder theory of trade, Role of dynamic factors, i.e. changes in tastes, technology and factor endowments in explaining the emergence of trade; The Rybinszynski theorem – concept and policy implications of immiserizing growth; Causes of emergence and measurement of intra industry trade and its impact of developing economies.

### **Unit – III**

Measurements of gains from trade and their distribution; Concepts of terms of trade, their uses and limitations; Hypothesis of secular deterioration of terms of trade, its empirical relevance and policy implications for less developed countries; Trade as an engine of economic growth.

### **Unit – IV**

The theory of interventions (Tariffs, Quotas and non-tariff barriers); Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution, balance of payments on trade partners both in partial and general equilibrium analysis. The political economy of non-tariff barriers and their implications; nominal, effective and optimum rates of tariffs – their measurement, impact and welfare implications.

### **Suggested Readings:**

1. Bhagwati, J. (Ed.) (1981), International Trade : Selected Readings, Cambridge University Press, Massachusetts.
2. Krugman, P.B. and M. Dkstfeld (1994), International Economics, Theory and Policy, Glenview, Foresman.
3. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle, NJJ. New York.
4. Soderston, Bo (1991), International Economics, The Mcmillan Press Ltd. London.

**M.A. (Economics) Semester – III**  
**Session 2019-20**  
**Course Code: MECL-3173**  
**Course Title: Indian Economy**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** Understand the dynamics of various problems and issues of Indian Economy

**CO2:** Issue involved in the development of agriculture and industrial sector.

**CO3:** Evolving issues of Indian Economy viz. external sector developments.

**M.A. (Economics) - Semester III**  
**Session 2019-20**  
**Course Code: MECL-3173**  
**Course Title: Indian Economy**

**Time: 3 Hours**  
**Theory: 80**

**Max. Marks: 100**

**CA: 20**

**Note: Instructions for the Paper-Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit – I**

National Income of India: Growth, Structure, Inter-state variations; limitations of national income estimates.

Indian Planning : Change in basic strategy, objectives; Decentralized planning : Need and objectives, achievements and appraisal of 11<sup>th</sup> and 12<sup>th</sup> Five Year Plan, **NITI Aayog**.

**Unit – II**

Major Economic Problems : Population, Unemployment, Poverty and inequalities, Inflation. **Social sector: health, education.**

**Unit – III**

Agriculture : Production and productivity trends, Second Green Revolution, Role of institutional (**Land reforms**) and technological factors, Agriculture Price Policy, Food Security and sustainable agricultural development.

**Unit – IV**

Industrial sector : **Major policy changes before and after 1991; State of micro, small and medium enterprises, large scale industry;** Public-private partnership.

Foreign sector : Composition, growth and pattern **of trade**, Role of MNCs, Balance of payment **position**, W.T.O. and India.

**Suggested Readings:**

1. Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essay in honour of Manmohan Singh, Oxford University Press, New Delhi.
2. Dutt and Sundram, Indian economy: S.Chand Publications
3. Chakravarty, S. (1987), Development Planning : The Indian Experience, Oxford University Press, New Delhi.
4. Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
5. Jalan, B. (1996), India's Economy Policy – Preparing for the Twenty First Century, Viking, New Delhi.
6. Sandesara, J.C. (1992), Industrial Policy and Planning, 1947-1991 : Tendencies, Interpretations and Issues, Sage Publications, New Delhi.

**M.A. (ECONOMICS) SEMESTER – IV**

**Session 2019-20**

**Course Code: MECL-4171**

**Course Title: Economics of Planning**

**Course Outcomes:**

After passing this course students will be able to:

**CO1:** understand different planning systems and relevance of planning in modern era.

**CO2:** understand the concept of technology, appropriate technology for under developed countries and transfer of technology from developed countries to developing countries.

**CO3:** explain and analyze the use of cost-benefit analysis.

**CO4:** appreciate the importance and limitations of planning in India.

**CO5:** demonstrate the understanding of different plan models.



**M.A. (Economics) Semester – IV**  
**Session 2019-20**  
**Course Code: MECL-4171**  
**Course Title: Economics of Planning**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section

**Unit – I**

**Economic Planning :** Meaning, objectives, rationale and types of planning; Different planning systems, Requisites for successful planning. Planning in third world countries in the context of Globalisation and Liberalisation.

**Unit – II**

**Investment criteria:** Rationale and types. Choice of Technique: Sen-Dobb Thesis, labour intensive vs. capital intensive technology; Choice of technique in underdeveloped countries and appropriate technique for UDC's. International transfer of technology- channels, importance and problems in the transfer of technology.

**Unit – III**

**Project evaluation:** Meaning, origin, rationale, project planning and commercial profitability criteria; social cost benefit analysis-meaning and technique; Shadow Prices: Meaning, importance and methods to compute shadow prices, Little Mirrless and UNIDO approaches – A comparison.

**Unit – IV**

**Indian plan models:** Harrod-Domar, Mahalanobis, Frisch and Sandee, Manne and Rudra, CELP model and its applications. Indian Planning: Objectives, strategy and evaluation of Indian planning. Resource mobilization for Indian plans, **NITI Aayog: composition, Functions and strategy.**

**Suggested Readings:**

1. Griffin, K.D. and Enos, J. L., Planning and Development.
2. Eckaus, P.S. and Parikh, K.S., Planning for Growth.
3. Rudra, Ashok, Indian Plan Models.
4. Todaro, P., Development Planning : Models & Methods
5. Sen, A.K., Choice of Techniques.
6. United Nations, Guidelines for Project Evaluation.
7. Bhattacharya, D., India's Five Year Plans: Economic Analysis.
8. Yotopoulos, P.A. and Nugent, G., Economics of Development and Planning: An Empirical Analysis.
9. Meier, G (Ed.), Leading Issues in Economic Development (selected readings).

**M.A. (ECONOMICS) SEMESTER – IV**  
**Session 2019-20**  
**Course Code: MECL-4172**  
**Course Title: International Economics-II**

**Course outcome:**

After passing this course students will be able to:

**CO1:** The course provides an analysis of economic relationship between countries, covering monetary issues.

**CO2:** The course considers Macro economic issues.

**CO3:** It deals with balance of payment account and mechanism of adjustment in BOP.

**CO4:** It discusses the exchange rate determination.

**CO5:** It reviews the financial crisis such as East-Asian crisis and Global Financial Crisis of 2008.

**CO6:** It focuses also on critical aspects of current policies environment such as economic integration, issues of international liquidity and implication of high debt.

**M.A. (Economics) Semester – IV**  
**Session 2019-20**  
**Course Code: MECL-4172**  
**Course Title: International Economics-II**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit – I**

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments; The process of adjustment under systems of gold standard: **Price Specie Flow Mechanism**, fixed exchange rates and flexible exchange rates; Expenditure-reducing and expenditure-switching policies and direct controls for adjustment; Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes.

**Unit – II**

Exchange rate; meaning and theories for the determination of exchange rate (PPP, monetary, Portfolio, and balance of payments). A critical review of the monetary approach to the theory of balance of payments adjustment. Relative merits and demerits of fixed and flexible exchange rates in the context of growth and development in developing countries.

**Unit – III**

Forms of economic cooperation; Reforms for the emergence of trading blocs at the global level; Static and Dynamic effects of a custom union and free trade area; Regional Economic grouping: EU, SAARC, NAFTA and **BRICS**; Multilateralism and WTO; Theory of short-term capital movements and East-Asian Crisis and lessons for developing countries. **Global Financial Crisis of 2008**

**Unit – IV**

**The Bretton Woods System: its working and reasons for its collapse**, Emerging International Monetary System with special reference of Post-Maastricht developments and developing countries; Reform of the International Monetary System, Portfolio and Foreign Direct Investments; International Debt Crisis. International economic institutions – Functions and achievements of GATT/WTO (TRIPS, TRIMS), UNCTAD/IMF: Need, adequacy and determinants of international reserves World Bank and Asian Development Bank – Their achievements and failures.

**Suggested Readings:**

1. Bhagwati, J. (Ed.) , International Trade : Selected Readings, Cambridge University Press, Massachusetts.
2. Kindleberger, C.P. , International Economics, R.D. Irwin, Homewood.
3. Krugman, P.B. and M. Dkstfeld , International Economics, Theory and Policy, Glenview, Foresman.
4. Salvatore, D. , International Economics, Prentice Hall, Upper Saddle, NJJ. New York.
5. Soderston, Bo , International Economics, The Mcmillan Press Ltd. London.
6. Godstein, M. , The Asian Financial Crisis : Causes and Systematic Implication, Institute for International Economics, Washington, D.C.

**M.A. (ECONOMICS) SEMESTER – IV**

**Session 2019-20**

**Course Code: MECL-4173**

**Course Title: Punjab Economy**

**Course outcome:**

After passing this course students will be able to:

**CO1:** To understand the dynamics of various problems of Punjab economy

**CO2:** To examine the causes of agrarian crisis in Punjab and find out ways to rejuvenate agriculture .

**CO3:** To analyse the issues involved in the slow growth of industries and suggest ways to tap the potentials for the growth of industries in Punjab.

**CO4:** To critically examine the financial parameters for financial stability.

**M.A. (Economics) Semester – IV**  
**Session 2019-20**  
**Course Code: MECL-4173**  
**Course Title: Punjab Economy**

**Time: 3 Hours**

**Max. Marks: 100**

**Theory: 80**

**CA: 20**

**Note: Instructions for the Paper–Setters:**

Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

**Unit – I**

**Introduction to Punjab Economy**

Structure of the economy; Population problem, Unemployment, Physical infrastructure: Power, Irrigation, Transport And Urbanization.

**Unit – II**

**Agriculture:** Output and cropping pattern, Green Revolution, its impact and implications. Rural Credit and **Agriculture Distress**.

Agricultural Diversification: Need, potential and constraints, , Agricultural Marketing, Contract farming: Need, growth and problems, Impact of W.T.O. on Agriculture.

**Unit – III**

Industrial Development: Pattern, performance and potential, State and Industrial development; Recent development in Industrial Policy in Punjab; Disinvestments in industries.

**Unit – IV**

Financial relations between centre and states, Recommendations of the latest Finance Commission; Pattern of devolution of resources from Centre to Punjab.

State Finances : Emerging pattern of revenue and expenditure in Punjab, Fiscal crisis in Punjab: Causes, impact, solutions.

**Suggested Readings:**

1. Singh Sukhwinder, Punjab's Economics Development In The Era of Globalisation, publisher Prakash book depot.
2. Singh Lakhwinder, Economic Transformation of a Developing Economy The Experience of Punjab, India.
3. Bawa, R.S. and P.S. Raikhy (2000), Punjab Economy: Emerging Issues, G.N.D.U., Amritsar.
4. P.S. Raikhy and Paramjit Nanda, Impact of WTO Regime on Punjab Industry.
5. Punjab Government, Statistical abstract of Punjab.
6. Punjab Government, Punjab Budget .