# ${\bf KURUKSHETRA\ UNIVERSITY, KURUKSHETRA}$

(Established by the State Legislative Act XII of 1956)

("A+" Grade, NAAC Accredited)

Scheme of Examination of MSc (HONS) 5-year INTEGRATEDin Economics Semester 1<sup>st</sup> to Semester 6<sup>th</sup> w.e.f. Session 2020-2021, Under Choice Based Credit System/LOCF in phased manner for the regular students of Institute of Integrated and Honors Studies, K.U. Kurukshetra.

Semester	Course Code	Course Name	Credit	Teaching	Sc	heme of Examir	nation	Time
				Hour per week	Theory	Internal Assessment	Total Marks	
Ist	CC-1 IN-ECX- 101	Micro Economics-I	6	6	120	30	150	3
	CC-2IN-ECX- 102	Macro Economics-I	6	6	120	30	150	3
	AECC-1	(English/MIL)/Communication/Environmental Studies (As per respective Department)	2	2	40	10	50	2
	GE-1 IN-ECX- 103	Money,Banking&Finance-I	6	6	120	30	150	3
	CC-3 IN-ECX- 201	Micro Economics-II	6	6	120	30	150	3
IInd	CC-4IN-ECX- 202	Macro Economics-II	6	6	120	30	150	3
	AECC-2	(English/MIL)/Communication/Environmental Studies (As per respective Department)	2	2	40	10	50	2
	GE-2 IN-ECX- 203	Money,Banking&Finance-II	6	6	120	30	150	3
	CC-5 IN-ECX- 301	Mathematics for Economics-I	6	6	120	30	150	3
	CC-6 IN-ECO- 302	Environmental Economics-I	6	6	120	30	150	3
IIIrd	CC-7 IN-ECO-	Statistics for Economics-I	6	6	120	30	150	3

	303							
	SEC-1	Computer Science Level-1/ Personality Development/MOOC (As per respective Department)	2	2	40	10	50	2
	GE-3IN-ECX- 304	Indian Economy-I	6	6	120	30	150	3
	CC-8 IN-ECO- 401	Mathematics for Economics-II	6	6	120	30	150	3
IVth	CC-9- IN-ECO- 402	Environmental Economics-II	6	6	120	30	150	3
	CC-10 IN-ECO- 403	Statistics for Economics-II	6	6	120	30	150	3
	SEC-2	Computer Science Level-1/ Personality Development/MOOC (As per respective Department)	2	2	40	10	50	2
	GE-4IN-ECX- 404	Indian Economy-II	6	6	120	30	150	3
	CC-11 IN-ECO- 501	Basic Econometrics	6	6	120	30	150	3
Vth	CC-12IN-ECO- 502	Development Economics-I	6	6	120	30	150	3
	DSE-1 IN-ECO- 503 or DSE-1 IN-ECX- 504	History of Economic Thought or Communication skills for Economists	6	6	120	30	150	3
	DSE-2 IN-ECO- 505 Or DSE-2 IN-ECO- 506	Economics of Health and Education or Public Economics	6	6	120	30	150	3

	GE-5IN-ECO-	International Trade-I	6	6	120	30	150	3
	507							
	CC-13 IN-ECO-	Economics of Finance	6	6	120	30	150	3
	601							
	CC-14- IN-ECO-	Development Economics-II	6	6	120	30	150	3
VIth	602							
	DSE-3 IN-ECO-	Research Methodology	4	4	80	20	100	3
	603	Research Methodology(P)	2	2	40	10	50	
	DSE-3 IN-ECO-	Or						
	604	Energy Economics						
	Or	Energy Economics(P)						
	DSE-3 IN-ECO-							
	605							
	DSE-3 IN-ECO-							
	606							
	DSE-4IN-ECO-	Industrial Economics	4	4	80	20	100	3
	607	Industrial Economics(P)	2	2	40	10	50	
	DSE-4IN-ECO-	Or						
	608	Agricultural Economics						
	Or	Agricultural economics(P)						
	DSE-4IN-ECO-							
	609							
	DSE-4IN-ECO-							
	610		_	_				_
	GE-6IN-ECO-	International Trade-II	6	6	120	30	150	3
	611							

<sup>\*</sup>Workload=1 Hour of teaching/2 hours of practical work=25 marks

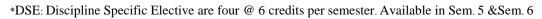
<sup>\*</sup>MIL stands for Modern Indian Languages

<sup>\*</sup>GE: Generic Elective@ 6 credits. Available in English only(As per respective Department)

<sup>\*</sup>CC: Core courses are fourteen @ 6 credits per semester.

<sup>\*</sup>AECC: Ability Enhancement Compulsory Course are two @ 2 credits per Semester. (Available in Sem. 1 and Sem. 2) (As per respective Department)

<sup>\*</sup>SEC: Skill Enhancement Course is four. @ 2 credits per semester, exist in Sem. 3 and Sem. 4(As per respective Department)



<sup>\*</sup>General elective may be other than economics.

## **MASTER OF SCIENCE ECONOMICS (Honors)**

(upto and inclusive 6<sup>th</sup> semester) 5-year integrated course

## PROGRAMME OUTCOMES (POs) for MSc honors course of Economics

- 1- To develop skills in graduate students so that they are able to acquire theoretical and practical knowledge about economics, economy, economic behavior, economic policies and economic institutions and economic problems.
- 2- To inculcate ability in students for critical thinking, lateral thinking about economic phenomena, problems and policies so as to create professional potential in them
- 3- To create awareness on ethical issues, good business practices, and ecologyeconomics interface
- 4- To development ability in youth for understanding basic economic rationality and effective communication skills
- 5- To prepare youth for career in teaching, industry, government organizations and self-entrepreneurship
- 6- To make students aware of natural resources, sustainable use and environment
- 7- To provide learning experience in students that instills deep interest in economic science for the benefit of society.

**PROGRAMME SPECIFIC OUTCOMES(PSOs) for MSc course in Economics** (Honors)

PSO1: demonstrate the knowledge and understanding of economic science i.e. vital processes of economy, consumer and producer behavior at micro level and macro-level

PSO2: critically think and correlate the economics knowledge with decision-making with regard to economic planning and economic policies, understanding of conflicts, tradeoffs, and welfare implications of economic measures to improve the quality of life in person as well as of community.

PSO3: demonstrate an understanding of the principles, methods of economic analysis in static and dynamic terms, analysis of economic data

PSO4: concise and meaningful writing and reporting, effective presentation skills, and ability to work productively in a group with co-operation

# Master of Science Economics(Honors)5-year integrated Semester-1 Micro Economics-I CC1-IN-ECX-101

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

## Note:

(Traditional & Modern), Concepts of

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	i-a To introduce the students about microeconomics,
(i-a)	its nature, scope, importance; Choice as basic
Introduction: Definition & Nature of	economic problem, and production possibility
Economics; Subject matter of Economics:	frontier
human behavior or product behavior	The aim is to make students attuned with economics
(Robbins' Definition) Basic Problems of an	as introduced at fresher's level, its subject-matter, and its nature. Also to make a student learn about the
economy	basic economic problem of choice and production
(1-b)	possibility frontiers
Fundamental economic Terms: Marginalist	i-b is meant to make student acquainted with basic
Rule, Opportunity cost, Time Value of	principles of economics and fundamental terms
Money	
UNIT-2	ii-a
	Objective is to acquaint the students with laws
(ii-a)	relating to consumption, and approaches to
Consumer Behavior- Law of equi-marginal	consumer's behavior: Neo-classical, and later
utility; Indifference Curve analysis: Consumer Equilibrium	developments ii-b
Equinorium	The contents under this section are designed to make
(ii-b)	students learn about the law of demand and elasticity
Law of Demand; Types of Goods (Ordinary	of demand, and the measurement by different
and Giffen); Elasticity of Demand (Price,	approaches.
Income and Cross)	
UNIT-3	iii-a
(iii-a)	The contents under this section are designed to make
Theory of Production: Theory of Cost	students learn about the producer or firm's behaviour

as laws of returns in short-period and long period, and least cost combinations, alongwith economies of Revenue.; Isoquants & least-cost

Combination; Laws of returns & economies of scale

(iii-b)

Supply and Law of Supply; Types of supply, Elasticity of supply.

UNIT-4

(iv-a)

Markets-firm's and industry's equilibrium in Perfect competition

(iv-b)

Monopoly: Monopoly market, price discriminating monopoly (first, second & third degree Price Discrimination),

Monopolistic Competition: Firm's equilibrium

(Chamberlin's model)

scale

iii-b

A general idea about the supply and supply law, changes in supply, and sensitivity of supply to price

iv-a

Objective is to make students' exposure to markets, behavior of perfectly competitive firm

iv-b

The students are expected to learn about behavior of firm in imperfect competition

Overview of Outcomes

Core Course- Micro Economics-I

After the successful completion of the course, the students will be able to Course Objective #

Ecx101.1 Have insight about the economics, the economic problem and consumer behavior in terms of demand and its elasticity

Ecx101.2 Have further understanding of consumer behavior in terms ofindifference curves, and responsive of demand

Ecx101.3 Have knowledge about nature of production, and producer behaviorin terms of laws of production, economies and diseconomies of scale, and elasticity of supply

Ecx101.4 Have understanding about markets, perfectly competitive firm, and industry.

## CORE-COURSE- MICROECONOMICS-1

CO#	PO	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
	1										
Ecx101.1	3	3	1	2	2	2	1	3	1	2	1
Ecx101.2	3	3	2	2	1	1	1	3	1	2	1
Ecx101.3	3	3	1	2	2	2	2	3	2	2	1
Ecx101.4	3	3	2	2	2	1	1	3	1	2	1
Average	3	3	1.5	2	1.75	1.5	1.25	3	1.25	2	1

- Archibald, G.C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- Baumol, W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.

- Borch, K.H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.
- Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press New York.
- Graff, J. De. V. (1957), Theoretical Welfare Economics, Cambridge University Press, Cambridge.
- Green H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.
- Heathfield & Wibe (1987): An Introduction to Cost & Production Functions; Macmillan, London.
- Henderson J. and Quandt R.E(1980): Micro-economic Theory: A Mathematical
- Hirshleifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- Koutsoyiannis A. (1990): Modern Microeconomics, Macmillan press, London.
- Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York
- Samuelson P.A, and Nordham, W.D(1998):Economics, Tata-McGraw Hill, NewDelhi
- Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi. Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.

# Master of Science Economics(Honors)5-year integrated Semester-I Macro Economics-I CC2-IN-ECX-102

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I (i-a) Nature and scope of Macroeconomics: Introduction to Macro-economic data; Circular flow of income (i-b) Gross and Net national product, national and personal income, methods of national income accounting.	i-a Objective is to introduce the students about macroeconomics, its nature, scope, importance with the aim is to make students acquainted with macro-economics as introduced at fresher's level, its subject-matter, and nature of economic processes as a circular flow.  i-b is meant to give a broad and indepth view of National Income concepts and measurement.
UNIT-2 (ii-a) Theories of Employment: Classical Theory of Employment, Say's Law of Markets, (ii-b) Keynesian Theory of Employment. UNIT-3	ii-a Objective is to acquaint the students with approaches relating to determination of Income and employment-Classical model, its limitations ii-b Students are expected to get exposure about Keynes' model, and basic comparison between the two approaches iii-a Objective is to make students' exposure to the concept of consumption function, and its attributes
(iii-a)Consumption function: Psychological law of consumption  (iii-b)Absolute income hypothesis, Life cycle hypothesis and Permanent income hypothesis	iii-bThe students are expected to learn about Income- consumption relationship in short run and long run in terms of the various kinds of Income-Absolute Income, Relative Income, Permanent Income and Income over life cycle.
UNIT-4 (iv-a) Investment and Investment function. Types	iv-a Aims at pupils' understanding of macroeconomic aggregate of investment; factors which determine

of Investment, and determinants of	investment, Investment multiplier and its role.
Investment, Concept of Investment Multiplier	
(iv-b)	iv-b
Decision to Invest: MEC and rate of interest.	Objective is to make students learn about decision to
Multiplier-Accelerator interaction.	Invest, and Income generation process, and aaplicability of
Applicability of Keynesian Theory to the	Keynesian economics todeveloping countries.
developing countries	

Overview of Outcomes

Core Course- Macroeconomics-I

After the successful completion of the course, the students will be able to

Course Objective #

Ecx102.1 Have insight about the macroeconomics, national income, concepts and measurement

Ecx102.2 Have further understanding of economy in terms of equilibrium level of income employment-classical and Keynesian approach

Ecx102.3 Have knowledge about nature of consumption function, and Consumption-income relationship in short and long run

Ecx102.4 Have understanding about Capital, investment function, decision to invest, and income generation process

## Core-Course- MacroEconomics-1

CO#	РО	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
	1										
Ecx102.1	3	3	1	2	1	2	1	3	1	2	1
Ecx102.2	3	3	2	2	1	1	2	3	2	2	1
Ecx102.3	3	3	1	2	2	2	1	3	1	2	1
Ecx102.4	3	3	2	2	2	1	1	3	1	2	1
Average	3	3	1.5	2	1.5	1.5	1.25	3	1.25	2	1

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Bernanke and Abel: Macroeconomics, 4th Edition
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Blanchard: Macroeconomics (Pearson Education), 4th Edition.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Dernburg, T.F.and D. M.Mc Dougall, Macroeconomics, McGraw Hill International Book Company.
- Dornbusch, Fisher and Startz: Macroeconomics (Tata McGraw-Hill), 9th Edition.
- Dornbusch, R. and F. Stanley (1999), Macroeconomics, Irwrin McGraw Hill, Inc. New

- York, 7th Edition.
- Edward Shapiro : Macroeconomic Analysis.
- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge.
- Gardner Ackley: Macroeconomic Theory
- Heijdra, B.J. and V.P. Fredericck (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Karl E. Case, Ray C. Fair: Principles of Macroeconomics, Publisher: Prentice Hall
- Lucas, R. (1981), Studies in Business Cycle Theory, MIT Press, Cambridge Masscechusetts.
- Mankiw N.G: Macroeconomics (Worth Publishers), 5th Edition,
- Mankiw, N. Greogory (2000), Macroeconomics Macmillan Worth Publishers 4th Edition.
- Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2Vols.), MIT Press, Cambridge.
- Rana &Verma: Macro-economics Analysis.
- Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
- Ruggles R. and N. Ruggles (1956), National Income Accounts and Income Analysis Mc Graw Hill, Newyork.
- Samuelson P.A, and Nordham, W.D(1998):Economics, Tata- McGraw Hill, New Delhi.
- Sheffirin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.
- Taylor, L. (1983), Structuralist Macroeconomics, Basic Books, New Longman. Turnovsky, S.J. (1977), Macroeconomic Analysis and Stabilization Policy, Cambridge University Press, Cambridge.
- Veniers, Y.P. and F.D.Sebold, (1977) Macroeconomics; Models and Policy John Wiley and Inc, USA.

# Master of Science Economics(Honors)5-year integrated Semester-I Money, Banking&Finance-1 GE1-IN-ECX-103

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
( <b>i-a</b> )	Aims at introducing the students about Barter&
Barter system – Characteristics and	money; nature and functions to money
difficulties; Money-Definition, functions,	(i-b)
classification, and significance;	
( <b>i-b</b> )	aims at making the students acquainted with money
Money supply determinants,	supply, its determinants and components of money
High-powered money and money	supply
multiplier; RBI measures of monetary	
aggregates.	
UNIT-2	(ii-a)
(ii-a)	Has the objective of giving exposure about money
Money market and Capital market-	and capital markets, organization&functions
constituents( lenders and borrowers)	(ii-b)
instruments, structure and Functioning	Aims at introducing students about dynamics of
(ii-b)	money and capital markets in India, and functions of SEBI
Nature& role of money& capital markets	of SEDI
in India; SEBI-Management, functions,	
power, guidelines.	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students' mind
Commercial banks –functions; credit	about commercial banks and their functions,
creation; Assets and liabilities of Banks;	methods of note issue, and problem of NPAs
Methods of notes issue in India; problem	iii-b
of non- performing assets	
(iii-b)	has the objective of functions of RBI, and its
Reserve bank of India-functions; credit	monetary policy

Ī	control instruments
	UNIT-4
	(iv-a)
	Recent Monetary Po
	in Ranking and Fine

Recent Monetary Policy; Need of Reform in Banking and Financial System

(iv-b)

The Narasimham Committee Report: Report of Committee to Review the Financial System 1991, Narsimham Committee Report on Banking Sector Reforms 1998. iv-a

has the objective of describing and explaining the basics of latest monetary policy, and need of banking reforms

iv-b

Aims at explaining the relevance and rationale of recommendations of various committees relating to banking reforms..

Overview of Outcomes

GE COURSE- Money, Banking&Finance-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.103.1 Have knowledge about the money & money supply determinants

Ecx.103.2 Have understanding of money and capital markets, their Functions, and regulatory body of capital market

Ecx.103.3 Have knowledge about commercial banks, RBI, and problem of NPAs Ecx103.4 Have understanding about basic elements of latest monetary Policy and banking reforms.

GE-COURSE- Money, Banking&Finance-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.103.1	3	3	1	2	1	2	1	3	2	2	1
Ecx103.2	3	3	2	2	1	1	2	3	2	2	1
Ecx103.3	3	3	1	3	2	1	1	3	2	2	1
Ecx103.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1

- A.D. Bain (1992) Economics of the Financial System
- Committee Report II) Summary in RBI Bulletin, July, 1998.
- DM Mithani:Money, Banking and Public Finance
- Goodhart, C.A.E (1978), Money. Information and Uncertainty, The Macmillan Press Ltd., London.
- Johnson, H.G (1972), Further Essays in Monetary Economics, George Allen and Unwin, London.
- Johnson, H.G and Nobay A.R. (1974), Issues in Monetary Economics, Oxford University Press, Delhi.

- Khan, MY: Indian Financial System; Tata-McGrawhill
- Krishna, K.L (1999), Econometric Applications in India, Oxford University Press, New Delhi.
- Laidler, D.E.W. (1977), Demand for Money: Theory and Evidence, Dum-Don Valley, New York.
- Narendra Jadhav (1993), Monetary Economics for India, Macmillan India Ltd., Madras.
- Pierce, David G and Shaw, David M (1974), Monetary Economics: Theories, Evidence and Policy, Butterworths, London.
- R.B.I Report of the Working Group : Money Supply Analytics and Methodology of Compilation, 1998.
- R.B.I. Report of the Committee on Banking Sector Reforms (Narasimham
- Roy Bailey (2005) The Economics of Financial Markets
- Suraj.B.Gupta: Monetary Economics Institutions, Theory & Policy; S Chand publications
- Suraj.B.Gupta:Monetary Planning for India
- Venugopal Reddy, Y (2000), Monetary and Financial Sector Reforms in India, UBS Publishers' Distributors Ltd., Chennai.
- Wrightsman, Dwayne (1971), An Introduction to Monetary Theory and Policy, The Free Press, New York. Gibson, Williamson E and Kaufman, George G (1971), Monetary Economics: Readings on Current Issues, TATA McGraw-Hill Publishing Company Ltd., New Delhi.
- Y.V. Reddy (2000), Monetary and Financial Sector Reforms in India UBSPD, New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-II Micro Economics-II CC3-IN-ECX-201

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	I coming chicatives
Content	Learning objectives
UNIT-I	(i-a) has the objective of introducing students with
(i-a)	elaborate view of factor pricing in classical and modern
Theory of Factor Pricing-Marginal	approach
Productivity theory, Modern theory	
( <b>i-b</b> )	(i-b) aims at making the students acquainted with
Rent: classical, Modern theory of rent,	determination of Rent, wage, interest and profit.
Quasi rent; wage, profit & interest	
UNIT-2	(ii-a) aims at giving the pupils knowledge about behavior
(ii-a)	of Imperfectly competitive firm under oligopoly non-
Forms of Imperfect competition:	collusion
Oligopoly-Cournot's duopoly Model,	
Bertrand's model, Reaction curves,	(ii-b) has the objective of giving knowledge about
Kinked Demand Model	behavior of imperfectly competitive firm under Oligopoly
	collusion
(ii-b)	Contaston
Cartels & Mergers;	
UNIT-3	iii-a
(iii-a)	aims at developing understanding about modern theory of
Factor pricing in perfectly competitive	factor pricing in perfect and imperfect competition.
market: Demand and Supply of labor in	
competitive market and imperfect	
competitive market and imperiect competition: Bilateral monopoly.	iii-b
(iii-b)	This has the objective of introducing students about price
Cobweb model;	oscillations.
	iv-a
UNIT-4	has the objective of explaining General equilibrium, and
(iv-a)	its condtions to the students
General Equilibrium Theory: The	its conditions to the students

Walrasian System, Existence, Uniqueness and Stability of an equilibrium, Graphical analysis of general equilibrium theory (iv-b)	iv-b aims at introducing the basics of welfare economics.
Pareto Improvement & Optimality Criterion (Efficiency of household, producer and product mix).	

Overview of Outcomes

CORE COURSE- MicroEconomics-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx201.1 Have insight about factor pricing under classical and modern approach

Ecx201.2 Have further understanding of imperfect markets in terms of Duopoly and Oligopoly.

Ecx201.3 Have knowledge about nature of factor pricing under perfect and imperfect markets

Ecx201.4 Have understanding about General equilibrium and elementary welfare economics.

#### **CORE-COURSE- Micro Economics-II**

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx201.1	3	3	1	2	1	2	1	3	2	2	1
Ecx201.2	3	3	2	2	1	1	2	3	1	2	1
Ecx201.3	3	3	1	2	2	1	2	3	2	2	1
Ecx201.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2	1.5	1.25	1.75	3	1.75	2	1

- Archibald, G.C: (ed) (1971): Theory of the Firm, Penguin, Harmondsworth.
- Bain, J: (1958): Barriers to New Competition, Harvard University Press, Harvard.
- Baumol, W.J: (1982): Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Dacosta, G.C: (1980): Production, Prices and Distribution, Tata Mc Graw Hill, New Delhi.
- Henderson, J.M. and Quandt (1980): Micro Economic Theory: A Mathematical Approach, Mc Graw Hill, New Delhi.
- Koutsoyiannis, A: (1979): Modern Microeconomics (2nd ed), Macmillan Press, London.
- Sen, A: (1999): Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- Stigler, G: (1996): Theory of Price, (4th ed), Prentice Hall of India, New Delhi. Varian, H: (2000): Microeconomic Analysis, W.W. Norton, New York.
- Stonier, A.W and Hague (1972): A Text Book of Economic Theory, ELBS, London. Ahuja, H.L. (2006): Advanced Economic Theory, Sultan Chand and Co., New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-II Macro Economics-II CC4-:IN-ECX-202

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	i-a
(i-a)	Objective is to introduce the students about
Aggregate demand, aggregate supply and the	Aggregate demand, nature, derivation, shifts in
price level: the aggregate demand	Aggregate demand, and its relationship with price
curve; short and long run aggregate curves;	level, as well as with income generation
Derivation of Aggregate Demand Curve,	
Shift in Aggregate Demand Curve and	
Multiplier Effect	i h is maant to give a h road view to students shout
(i-b)	i-b is meant to give a b road view to students about Aggregate supply, nature, derivation, and interaction
A	with Aggregate demand, and natural rate hypothesis
Aggregate Supply: Short Run and Long Run	with Aggregate demand, and natural rate hypothesis
Aggregate supply curve, Derivation of Aggregate Supply Curve, Shift in Aggregate	
Supply Curve, AD-AS Model: Friedman's	
Natural Rate Hypothesis	
UNIT-2	ii-a
(ii-a)	Objective is to acquaint the students with value of
Fluctuations in Value of money: Inflation-	money, its fluctuations, Inflation-typology,
Concept, types-Demand pull, and Cost-	measurement and causes
push, Measurement of Inflation(price-index)	ii-b
(ii-b)	
Philips Curve, Policy-measures; Deflation-	Students are expected to get exposure about Phillips
nature, causes, and policy-measures	curve, and inquiry into the causes &measures of
UNIT-3	deflation
(iii-a)	iii-a
Rate of Interest: Classical, Keynesian and	Objective is to make students' expenses to the
Rate of Interest. Classical, Reynesian and	Objective is to make students' exposure to the

IS-LM Analysis. IS – LM Model:

commodity market equilibrium and the IS curve, money market equilibrium and the LM curve

#### (iii-b)

macroeconomic equilibrium and the adjustment process: Monetary& Fiscal Policy co-ordination

UNIT-4

(iv-a)

Trade Cycles-nature, characteristics

(iv-b)

Theories of trade cycles-Hicks, Samuelson and Kaldor; Policy-measures.

theories of interest rate in classical, Keynesian viewpoint; later development as IS-LM model, its working.

iii-b

The students are expected to learn about adjustment process under IS-LM framework, and monetary-fiscal policy co-ordination

iv-a

Aims at introducing the students about trade cycles, phases, characteristics

iv-b

\has the objective of giving exposure to students about explanation of trade cycles in terms of approaches by Hicks, Samuelson, Kaldor, as well as remedial measures

Overview of Outcomes

CORE COURSE- MacroEconomics-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx202.1 Have insight about Aggregate demand and Aggregate Supplyand its role in macroeconomic equilibrium and income generation

Ecx202.2 Have further understanding of value of money, inflation and Inflation and employment relationship.

Ecx202.3 Have knowledge about nature of interest rate, IS-LM framework and monetary-fiscal policy interaction

Ecx202.4 Have understanding about trade cycles, and theories /models

#### CORE-COURSE- MACROECONOMICS-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx202.1	3	3	1	2	1	2	1	3	1	2	1
Ecx202.2	3	3	2	2	1	1	2	3	2	2	1
Ecx202.3	3	3	1	2	2	1	2	3	1	2	1
Ecx202.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2	1.5	1.25	1.75	3	1.5	2	1

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Bernanke and Abel: Macroeconomics, 4th Edition
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Blanchard: Macroeconomics (Pearson Education), 4th Edition.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row,

- New York.
- Dernburg, T.F.and D. M.Mc Dougall, Macroeconomics, McGraw Hill International Book Company.
- Dornbusch, Fisher and Startz: Macroeconomics (Tata McGraw-Hill), 9th Edition.
- Dornbusch, R. and F. Stanley (1999), Macroeconomics, Irwrin McGraw Hill, Inc. New York, 7th Edition.
- Edward Shapiro : Macroeconomic Analysis.
- Frisch, H. (1983), Theories of Inflation, Cambridge University Press, Cambridge.
- Gardner Ackley: Macroeconomic Theory
- Heijdra, B.J. and V.P. Fredericck (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Karl E. Case, Ray C. Fair: Principles of Macroeconomics, Publisher: Prentice Hall
- Lucas, R. (1981), Studies in Business Cycle Theory, MIT Press, Cambridge, Masscechusetts.
- Mankiw N.G: Macroeconomics (Worth Publishers), 5th Edition,
- Mankiw, N. Greogory (2000), Macroeconomics Macmillan Worth Publishers 4th Edition.
- Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics, (2Vols.), MIT Press, Cambridge.
- Rana &Verma: Macro-economics Analysis.
- Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
- Ruggles R. and N. Ruggles (1956), National Income Accounts and Income Analysis Mc Graw Hill, Newyork.
- Samuelson P.A, and Nordham, W.D(1998):Economics, Tata- McGraw Hill, New Delhi.
- Sheffirin, S.M. (1996), Rational Expectations, Cambridge University Press, Cambridge.
- Taylor, L. (1983), Structuralist Macroeconomics, Basic Books, New Longman. Turnovsky, S.J. (1977), Macroeconomic Analysis and Stabilization Policy, Cambridge University Press, Cambridge.
- Veniers, Y.P. and F.D.Sebold, (1977) Macroeconomics; Models and Policy John Wiley and Inc, USA.

# Master of Science Economics(Honors)5-year integrated Semester-II Money, Banking &Finance-II GE2-IN-ECX-203

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a)	Aims at introducing the students about DEMAND
Demand for Money- Classical: Quantity Theory	FOR MONEY:approach of classicals, neoclassical
Approach, Fisher's Equation; Neoclassical:	and Keynes'
Cambridge Quantity Theory; Keynesian Liquidity	
Preference Approach: Transaction, Precaution,	(i-b)
Speculative Demand for Money, Liquidity Trap	aims at making the students acquainted with
(i-b)	monetarist approach to the demand for
Monetarists' approach: Friedman's Modern	money;Interest rate and portfolio
Quantity Theory of Money; Determinants of	
demand for money: Income, Wealth and Interest	
Rate, Shoe-Leather Approach.	(ii-a)
UNIT-2	(11-a)
(ii-a)	Has the objective of giving exposure about money
Money and Capital markets-Call Money	market instruments& operations
Operations: Inter-Bank Call Money Market; Bill market operations: Treasury Bill, Commercial	market instrumentsee operations
Bill;	(ii-b)
(ii-b)	
Stock markets:	Aims at introducing students about capital market
	instruments and operations, and working of
Mechanism, Instruments and Operations; National	NSE&BSE
Stock Exchange; Bombay Stock Exchange.	
UNIT-3	iii-a
(iii-a) Evaluate Pates, manning, types, Fived and	aims at developing understanding in students' mind
Exchange Rates: meaning, types: Fixed and Flexible Exchange Rate, Policy of Managed	about EXCHANGE RATES, and exchange rate
Flexibility: Adjustable Peg System, Crawling peg	adjustments in historical perspective by leading
Tientoffity. Adjustable Leg System, Clawfing peg	nations of Europe and US

system, Policy of Managed Floating: Clean & Dirty Floating, European Snake (iii-b)

Multiple Exchange Rates; Speculation, Hedging, Swapping and arbitrage operations in foreign currency.

## UNIT-4

## (iv-a)

Development Banking: Role, Nature and Functions, Non-Banking Financial intermediaries, Merchant Banking, Investment Banking

#### (iv-b)

Refinancing institutions; Financing of foreign trade-modes and instruments; Export-Import Bank(EXIM): Role and Functions.

#### iii-b

has the objective of giving understanding about multiple exchange rates and various operations in foreign exchange market

#### iv-a

has the objective of describing and explaining the basics of development banks , merchant banks and NBFIs

#### iv-b

Aims at explaining the relevance and rationale of refinancing institutions, and export-import procedures and EXIM bank functions

## **OVERVIEW OF OUTCOMES**

GE COURSE- Money, Banking&Finance-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.203.1 Have knowledge about the demand for money and Classical, neoclassical and Modern approach to it

Ecx.203.2 Have understanding of money and capital market instruments, mechanism of stock markets and leading stock exchanges

Ecx.203.3 Have knowledge about exchange rate mechanism, adjustments ,And foreign exchange market operations

Ecx203.4 Have understanding about development banking, refinancing and EXIM bank operations for trade financing..

## GE-COURSE- Money, Banking&Finance-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.203.1	3	3	1	2	1	2	1	3	2	2	1
Ecx203.2	3	3	2	2	1	1	2	3	2	2	1
Ecx203.3	3	3	1	3	2	1	1	3	2	2	1
Ecx203.4	3	3	2	2	2	1	2	3	2	2	1
Average	3	3	1.5	2.25	1.5	1.25	1.5	3	2	2	1

- A.D. Bain (1992) Economics of the Financial System
- Committee Report II) Summary in RBI Bulletin, July, 1998.
- DM Mithani:Money, Banking and Public Finance
- Goodhart, C.A.E (1978), Money. Information and Uncertainty, The Macmillan Press Ltd., London.

- Johnson, H.G (1972), Further Essays in Monetary Economics, George Allen and Unwin, London.
- Johnson, H.G and Nobay A.R. (1974), Issues in Monetary Economics, Oxford University Press, Delhi.
- Khan, MY: Indian Financial System; Tata-McGrawhill
- Krishna, K.L (1999), Econometric Applications in India, Oxford University Press, New Delhi.
- Laidler, D.E.W. (1977), Demand for Money: Theory and Evidence, Dum-Don Valley, New York.
- Narendra Jadhav (1993), Monetary Economics for India, Macmillan India Ltd., Madras.
- Pierce, David G and Shaw, David M (1974), Monetary Economics: Theories, Evidence and Policy, Butterworths, London.
- R.B.I Report of the Working Group : Money Supply Analytics and Methodology of Compilation, 1998.
- R.B.I. Report of the Committee on Banking Sector Reforms (Narasimham
- Roy Bailey (2005) The Economics of Financial Markets
- Suraj.B.Gupta: Monetary Economics Institutions, Theory & Policy; S Chand publications
- Suraj.B.Gupta:Monetary Planning for India
- Venugopal Reddy, Y (2000), Monetary and Financial Sector Reforms in India, UBS Publishers' Distributors Ltd., Chennai.
- Wrightsman, Dwayne (1971), An Introduction to Monetary Theory and Policy, The Free Press, New York. Gibson, Williamson E and Kaufman, George G (1971), Monetary Economics: Readings on Current Issues, TATA McGraw-Hill Publishing Company Ltd., New Delhi.
  - Y.V. Reddy (2000), Monetary and Financial Sector Reforms in India UBSPD, New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-III Mathematics for Economists-I CC5-IN-ECX-301

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Learning objectives
(i-a)
Aims at introducing the students about fundamentals of Set
theory and applications
(i-b)
aims at making the students understand the concept of
functions, limit and continuity.
(ii-a)
Has the objective of giving exposure about Matrices, and
operations on matrices
(ii-b)
Aims at introducing students about applications of matrices,
and higher operations on them.
and higher operations on them.
iii-a
aims at developing understanding in students' mind about
derivatives, partial and total, and their economic applications
iii-b

#### (iii-b)

Maxima & minima of functions: necessary and sufficient conditions for functions, economic application of unconstrained & constrained maxima & Minima.

has the objective of detailing about maxima and minima of functions, and applications of constrained and unconstrained maxima and minima.

#### UNIT-4

#### (iv-a)

Linear Programming: Graphical and Simplex method, Dual Problem in linear programming

## (iv-b)

, Game Theory: odd moments method, principle of dominance & simplex method, Prisoner's dilemma in game theory, concept of Nash Equilibrium.

iv-a

has the objective of describing and explaining the basics of Linear programming problems and solution

#### iv-b

Aims at explaining the applications of game theory and Nash equilibrium...

#### **OVERVIEW OF OUTCOMES**

CORE COURSE- Mathematics for Economists-I

After the successful completion of the course, the students will be able to Course Objective #

Ecx.301.1 Have knowledge about the basics of set theory, economic applications

Ecx.301.2 Have understanding of matrix algebra and economic applications of matrices

Ecx.301.3 Have knowledge about derivatives and differentiation, maxima and minima of a function.

Ecx301.4 Have understanding about basic elements of linear programming and game theory.

#### CORE-COURSE- Mathematics for Economists-L

CO#	PO	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
	1										
Ecx301.1	3	3	1	2	1	2	1	3	2	2	1
Ecx301.2	3	3	2	2	1	1	1	3	2	2	1
Ecx301.3	3	3	1	3	2	1	2	3	2	2	1
Ecx301.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.25	3	2	2	1

- AC Chaing, K Wainwright: Fundamental Methods of mathematical economics, McGraw-Hill Publishing co.
- Aggarwal, H.S.: Modren Micro-Economics, Konark, New Delhi, 1998.
- Allen R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
- Bhardwaj RS: Mathematics for Economics and Business, EXCEL Books, New Delhi
- Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.

- Elias J. Richard: Mathematics for Business and Economics, D. Van Nostrand Company, New York, Cincinnati, Toronto, London, Melbourne
- Henderson J. and Quandt R.E(1980): Micro-economic Theory: A Mathematical Approach; McGraw-Hill, New Delhi
- Jain TR, Aggarwal SC, Rana, RK: Basic Mathematics for Economists, V Publications, New Delhi
- Leontief, W. (1936) Quantitative input-output relations in the economic systems of the United States. Review of Economics and Statistics, Vol 18, pp.105-125.
- Mathematics for Economics by Michael Hoy etal, PHI, New Delhi, 2004.
- Miller, R.E. and P.D. Blair (1985) Input-Output Analysis: Foundations and Extensions. Prentice-Hall, Englewood Cliffs, New Jersey.
- Operations Research by Hamdy A. Taha
- Operations Research by R. Wagnor
- Proops, J., Faber, M. and Wagenhals, G. (1993) Reducing CO2 Emissions: A Comparative Input-Output Study for Germany and the UK, Springer-Verlag, Heidelberg.
- Quantitative Methods by D.R. Aggarwal ,Basic Mathematics for Economists by R.C. Joshi, New Academic Publishing.
- Quantitative Methods for Business and Economics by Adil H. Mouhammed, PHI, New Delhi, 2003.
- Quantitative Techniques in Management by N.D. Vohra, TMH.
- Sydsaeter K, Hammond. P. J(2002): Mathematics for economic analysis, Pearson Education Asia, Delhi Taro Yamane, Mathematics for Economists, PHI, 1973

## Master of Science Economics(Honors)5-year integrated Semester-III Environmental Economics-1 CC6- IN-ECX-302

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I (i-a) Environment and Economy: Nature and scope of environmental economics; Linkage between environment and economy (i-b) Population-environment linkage; Sustainable Development.	(i-a) Aims at introducing the students about environment economics, and linkage between environment and economy (i-b) aims at making the students acquainted with linkage of environment with population, and sustainable development
UNIT-2 (ii-a) Market failure: Incomplete markets; Externalities (ii-b)	(ii-a) Has the objective of giving exposure about market failures, and nature of externalities. (ii-b)
Environment as public good – Non-exclusion, Non-rivalry; Non-convexities; Asymmetric information.	Has the objective of acquainting pupils about environment as public good;qualifying features and asymmetric information
UNIT-3 (iii-a) Environment and Development: Natural resources; Human capital vs. Physical capital: Their use & effect on Environment (iii-b)	iii-a aims at developing understanding in students' mind about Role of environment in natural resource development and capital and rational use. iii-b
Role of Environment Education in	has the objective of making the understanding of role of environment education, Green GDP

controlling pollution; Environmental Educational in India. Green GDP; Environmental Kuznets Curve;	
UNIT-4	iv-a has the objective of describing and explaining the basics of Environment laws in India, Pollution
(iv-a)Environmental legislation: Pollution- causes, control and abatement	control
( <b>iv-b</b> )Environment protection mechanism in India; Environmental institutions and grass root movements.	iv-bAims at explaining the relevance and rationale of environment protection, and role of institutions.

## **OVERVIEW OF OUTCOMES**

CORE COURSE- Environment Economics-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.302.1 Have knowledge about constituents of environment, its Linkage with economy and population

Ecx.302.2 Have understanding of market failure, and role of externalities

Ecx.302.3 Have knowledge about relationship of environment with Natural resources, and role of environment education

Ecx302.4 Have understanding about basic elements of environment laws, and measures to protect the environment.

CORE-COURSE- Environment Economics-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.302.1	3	3	1	2	1	2	1	3	2	2	1
Ecx302.2	3	3	2	2	1	3	1	3	2	2	1
Ecx302.3.3	3	3	1	3	2	3	1	3	2	2	1
Ecx302.4	3	3	1	2	2	3	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	2.75	1	3	2	2	1

- Baumol, W.J. and W.E. Oates (1988), The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
- Berman, P. (Ed.) (1995), Health Sector Reform in Developing Countries: Making Health Development Sustainable, Boston: Harvard Series on Population and International Health.
- Blaug, M. (1972), Introduction to Economics of Education, Penguin, London.
- Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
- Chary, S.N. and Vyasulu, Vinod (2000), Environmental Management an Indian Perspective, Macmillan
- Cohn, E. and T. Gaske (1989), Economics of Education, Pergamon Press, London.
- Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.
- Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and

- Practice, Macmillan.
- Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
- Jeroen, C.J.M. van den Bergh (1999), Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd., U.K.
- Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.
- Pearce, D.W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
- Perman, R. Ma and J. McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.
- Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
- Schultz, T.W. (1971), Investment in Human Capital, Free Press, New York.
- Tietenberg, T. (1994), Environmental Economics and Policy, Harper Collins, New York.

# Master of Science Economics(Honors)5-year integrated Semester-III Statistics for Economics-1 CC7- IN-ECX-303

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

## Note:

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
   (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the

(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Tour units (24 marks each)	1
Content	Learning objectives
UNIT-I	(i-a)
(i-a)	Aims at making basic understanding the
Measures of Central Tendency: Arithmetic	computation of first order measures, their
Mean, Weighted Arithmetic Mean,	intererlationship
Median, Mode, Geometric Mean and	
Harmonic Mean	(i-b)
( <b>i-b</b> )	
Partition values-Quartiles, Deciles,	Has the objective of introducing about the partition
Percentiles Standard Deviation and	values and measures of dispersion.
Lorenz Curve	
UNIT-2	(ii-a)
(ii-a)	Aims at developing students' minds about the
Skewness: Types, measures of skewness,	concept of skewness and moments
Pearson's, Bowley's, Kelly's Method,	
Moments, moments about mean and zero	(ii-b)
	Aims at making understanding of kurtosis, and the
(ii-b)	measure based on moments
Measures of Kurtosis: Beta and Gamma	
Coefficients based on Moments	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students' mind
Correlation: Definition, types, degrees	about correlation, its properties and measurement
and methods-scatter diagram, Karl	
Pearson's Coefficient of Correlation,	iii-b
Variance-Covariance Method, Rank	
Correlation, Concurrent Deviation	has the objective of acquainting students with basic
Method, Coefficient of Determination,	elements of regression, and standard error of
	estimate.

#### Probable Error

(iii-b) Linear Regression Analysismeaning, types, regression lines, regression co-efficient and regression equations and least square method

#### **UNIT-4**

(iv-a)Index Numbers: meaning, types, uses and limitations of index numbers, Problems in construction of index numbers, methods of construction of index numbers, Tests of adequacy of index numbers; Some specific problems: chainbase & fixed-base index, base shifting, splicing, deflating of index numbers, Consumer Price index.

(iv-b) Time-Series: & meaning components of time-series, model of analysis of time series, methods of measuring trend, and its components; seasonal variations: simple average method, moving average method, ratio to moving average, ratio to trend method and link relative method

iv-a

aims ate developing understanding about Index numbers, tests and operations on index number series

iv-b

Goal is to make students familiar with Time series analysis, measurement of trend and seasonal variations by various methods

#### **OVERVIEW OF OUTCOMES**

CORE COURSE- Statistics for Economics-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.303.1 Have knowledge about the measures of central tendency and partition values

Ecx.303.2 Have understanding about the skewness and kurtosis

Ecx.303.3 Have knowledge about correlation and regression. Forecasting method based on least squares

Ecx303.4 Have understanding about basic elements of Index numbers and time series, trend measurement

#### CORE-COURSE- Statistics for Economics-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.303.1	3	3	1	2	1	2	1	3	2	2	1
Ecx303.2	3	3	2	2	1	1	1	3	2	2	2
Ecx303.3	3	3	1	3	2	1	1	3	2	2	2
Ecx303.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1	3	2	2	1.5

- Cocharm, W. G., Sampling Techniques, John Willey, New York.
- Gupta S. C. Fundamentals of statistics, Himalaya Publishing house, New Delhi.
- Gupta S.C. and V.K. Kapoor, Fundamentals of Applied Statistics, S. Chand and Sons New Delhi.
- Gupta S.P. and Gupta M. P. Business statistics, Sultan chand and sons, New Delhi.
- Hansen, hurditz and meadow, Sample Survey Methods and Theory, John Willey New York.
- Horace Secrist: Readings and Problems in statistical methods; Macmillan
- Kamenta J. Elements of Econometrics, Machmillan Publishing Co., Inc. New York.
- Murray.R Spiegel: Statistics; Schaum Outline Series
- Speigal, M. R. Theory and Prodblems of Statistics, McGraw Hill Book, London § Croxton, F. E., D. Cowden and S. Kliein, Applied General Statistics, Prentice Hall, New Delhi.
- TR Jain, SC Aggarwal, RK Rana: Basic Statistics for Economists; VK Publications
- Vohra, N. D. Quantitative Techniques in Management, Tata McGraw Hill, New Delhi.
- Yates, Frank, Sampling Methods for Census and Surveys, Charles, Griffin Co., London.

# Master of Science Economics(Honors)5-year integrated Semester-III Indian Economy-I GE3-IN-ECX-304

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) Nature and Characteristics of Indian	Aims at introducing the students about nature of
Economy: India as Underdeveloped and	Indian economy, and underdevelopment in
Developed economy. Colonialism and	historical perspective
Underdevelopment of the Indian Economy:	(i-b)
	Aims at introducing the students about impact of
(i-b) British Rule and the Exploitation of	exploitation of Indian economy during British
India, The British Rule and India's	rule
Underdevelopment, State Policies and	
Economic Underdevelopment.	
UNIT-2	(ii-a) Has the objective of giving exposure about
(ii-a) Economic Planning: Rationale,	planning and strategy of plans
Features and Objectives, Strategy of	
Economic Planning	(ii-b) Has the objective of acquainting pupils
(ii-b)	about latest status of planning process in India,
Current plan scenario: Objectives and	and current long term plan
Targets of perspective plan; NITI Aayog.	
UNIT-3	iii-a
ONII-3	aims at developing understanding in students'
(iii-a)Problems in Indian Economy: Nature	mind about nature of problem of unemployment
of Employment and Unemployment in	in India
India, Concepts, Types, Trends and	
Structure of Unemployment, Causes of	iii-b
Unemployment Causes of	
(iii-b) Poverty: Concepts of Poverty Line,	has the objective of making the understanding of
Incident of Poverty in India, Causes and	nature, causes of poverty, and and measures to do
Measures; Social Exclusion in India.	away with social exclusion.

UNIT-4	iv-a
	has the objective of describing and explaining the
(iv-a)Demographic features of Indian	basics of demography of India, trends.
Economy	iv-b
	Aims at explaining the nature of rural-urban
(iv-b) Problems of Rural-Urban Migration,	migration in India, and population planning
causes and Remedies, Urbanization,	measures
Recent Population Policy.	

# OVERVIEW OF OUTCOMES

GE COURSE- Indian Economy-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.304.1 Have knowledge about the distinguishing features of Indian economy, and historical impact of British rule

Ecx.304.2 Have understanding about the concept of planning and latest facts about planning system and plans

Ecx.304.3 Have knowledge about causes of unemployment and poverty in India, and strategy. Ecx304.4 Have understanding about basics of demography of India, urbanization, population policy

GE – Indian Economy-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx304.1	3	3	1	2	1	2	1	3	2	2	1
Ecx304.2	3	3	2	2	1	1	1	3	2	2	1
Ecx304.3	3	3	1	3	2	1	1	3	2	2	1
Ecx304.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1	3	2	2	1

- Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
- Bardha, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
- Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
- Goel, MM (2011): Economics of Human Resource Development in India, VK Global Publications, New Delhi
- Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
- Government of India, Planning Commission; Five Year Plan Development.
- Jalan, B. (1992), The Indian Economy Problems and Prospects, Viking, New Delhi.

- Jalan, B. (1996), India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.
- Kapila Uma Indian Economy Academic Foundation New Delhi Latest Edition.
- Mishra S.K.and Puri V.K, Indian Economy Himalya Publication House Latest Edition.
- Monga G.S.and Goel M.M. (2001) Wage Goods Approach and Development Deep and Deep New Delhi.
- Parikh, K.S. (1999), India Development Report 1999-2000, Oxford University Press, New Delhi.
- Reserve Bank of India, Report on Currency and Finance, (Annual).
- Rudar Dutt and Sundram; Indian Economy S Chand and Company Latest Edition
- Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda for 21st Century (Essays in honour of Prof. P.R. Brahmananda), Deep & Deep Publications, New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-IV Mathematics for Economists-II CC8-IN-ECX-401

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
( <b>i-a</b> )	Aims at introducing the students about fundamentals of
Analytical geometry- Equation of straight	straight line equation and its parameters
line Slope: Positive & Negative slope,	
Zero slope, Undefined Slope	(i-b)
( <b>i-b</b> )	
The point slope formula; circle, conic	aims at making the students understand the point slope
sections, parabola, rectangular hyperbola;	formula, and derivation in case of circle, conic sections, and
Applications in economics	applications in economics
UNIT-2	(ii-a)
(ii-a)	Has the objective of giving exposure about Integration, and
Integration-rules of integration, by parts,	methods
and by substitution, by partial fractions	
	(ii-b)
(ii-b)	Aims at introducing students about integration of logarithmic
Integration of logarithmic & exponential	and exponential functions;definite integral; economic
functions, evaluation of areas, Definite	applications
Integral, Economic applications.	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students' mind about
Differential equations-solution;	differential equations, solution, and its economic applications
homogeneous& non-homogeneous	iii-b
differential equations, Exact differential	has the objective of detailing about difference equations,
equation, Economic applications	solution and their economic applications
(iii-b)	
Difference equations-Solution, general&	
particular; Homogeneous & General linear	
difference equations with constant co-	

efficient	economic	applications.
emclem,	economic	applications.

#### UNIT-4

(iv-a)Linear and quadratic equation and its economic applications, Rate of growth (Compound Annual Growth Rate) and its measurement

(iv-b)Present value (Or capital value) and its application; Annuities: types, amount and Present value

#### iv-a

has the objective of describing and explaining the basics of Linear and quadratic equations, and their applications

#### iv-b

Aims at explaining the applications of linear and quadratic equations in present value of assets and fixed regular inflows..

#### **OVERVIEW OF OUTCOMES**

CORE COURSE- Mathematics for Economists-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.401.1 Have knowledge about the basics of analytical geometry, economic applications

Ecx.401.2 Have understanding of differential and difference equations, Economic applications

Ecx.401.3 Have knowledge about integration, methods and economic applications

Ecx401.4 Have understanding about basic elements of linear and quadratic equations and applications in economics.

#### CORE-COURSE- MATHEMATICS FOR ECONOMISTS-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx401.1	3	3	1	2	1	2	1	3	2	2	1
Ecx401.2	3	3	2	2	1	1	1	3	3	2	1
Ecx401.3	3	3	1	3	2	1	1	3	3	2	1
Ecx401.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1	3	2.5	2	1

- AC Chaing, K Wainwright: Fundamental Methods of mathematical economics, McGraw-Hill Publishing co.
- Aggarwal, H.S.: Modren Micro-Economics, Konark, New Delhi, 1998.
- Allen R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
- Bhardwaj RS: Mathematics for Economics and Business, EXCEL Books, New Delhi
- Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.
- Elias J. Richard: Mathematics for Business and Economics, D. Van Nostrand Company, New York, Cincinnati, Toronto, London, Melbourne
- Henderson J. and Quandt R.E(1980): Micro-economic Theory: A Mathematical Approach; McGraw-Hill, New Delhi
- Jain TR, Aggarwal SC, Rana, RK: Basic Mathematics for Economists, V Publications, New Delhi

- Leontief, W. (1936) Quantitative input-output relations in the economic systems of the United States. Review of Economics and Statistics, Vol 18, pp.105-125.
- Mathematics for Economics by Michael Hoy et al, PHI, New Delhi, 2004.
- Miller, R.E. and P.D. Blair (1985) Input-Output Analysis: Foundations and Extensions. Prentice-Hall, Englewood Cliffs, New Jersey.
- Operations Research by Hamdy A. Taha
- Operations Research by R. Wagnor
- Proops, J., Faber, M. and Wagenhals, G. (1993) Reducing CO2 Emissions: A Comparative Input-Output Study for Germany and the UK, Springer-Verlag, Heidelberg.
- Quantitative Methods by D.R. Aggarwal ,Basic Mathematics for Economists by R.C. Joshi, New Academic Publishing.
- Quantitative Methods for Business and Economics by Adil H. Mouhammed, PHI, New Delhi, 2003.
- Quantitative Techniques in Management by N.D. Vohra, TMH.
- Sydsaeter K, Hammond. P. J(2002): Mathematics for economic analysis, Pearson Education Asia, DelhiTaro Yamane, Mathematics for Economists, PHI, 1973

# Master of Science Economics(Honors)5-year integrated Semester-IV Environmental Economics-II CC9-IN-ECX-402

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

## **Note:**

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
   (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the

four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
	Aims at introducing the students about
(i-a) Concept and indicators of sustainable	SUSTAINABLE development, and criteria of
development - sustainability rules,	sustainability
	(i-b)
(i-b)	aims at making the students understand the
Common-Perrings model; The	approaches to sustainable development by leading
Solow/Hartwick approach to sustainability.	environment economists.
UNIT-2	(ii-a)
	Has the objective of giving exposure about the
(ii-a)Management of common property	management of common property resources
resources; CPRs, LDCs and sustainable	(ii-b)
development	Aims at introducing students about rational approach
(: h) Subsidies Controls and use of	to subsidies and utilization of natural resources
(ii-b)Subsidies, Controls and use of natural capital in India.	to substitute and attribution of natural resources
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students' mind
	about relationship of energy-use, water-use and
Environment and energy; Water resource	pollution ;control measures
planning; Water and air pollution - existing	
pollution control mechanisms	iii-b
(;;; b)	has the objective of detailing about impact of land and
(iii-b)	forest degradation; regeneration strategies
Land and forest degradation and the	
strategy for regeneration.	
UNIT-4	iv-a
(iv. a)	
(iv-a)	

Global environmental issues; Problems in managing climate change; I (iv-b) International trade and environment; Trade and environment in WTO regime.	has the objective of describing and explaining the basics of climate change among Global environmental issues
	iv-bAims at explaining the relationship of trade and environment, and WTO's measures for environment protection.

#### **OVERVIEW OF OUTCOMES**

CORE COURSE- Environmental Economics-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.402.1 Have knowledge about the basics of sustainable development, and approaches to sustainable development

Ecx.402.2 Have understanding of common property resource management, and natural capital Ecx.402.3 Have knowledge about impact of energy use and water use on quality of environment, pollution control strategy

Ecx402.4 Have understanding about basic elements of climate change and WTO measures for protection of environment.

## CORE-COURSE- ENVIRONMENTAL ECONOMICS-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx402.1	3	3	1	2	1	2	2	3	2	2	1
Ecx402.2	3	3	2	2	1	2	2	3	2	2	2
Ecx402.3	3	3	1	3	2	2	2	3	2	2	1
Ecx402.4	3	3	1	2	2	2	2	3	2	2	2
Average	3	3	1.25	2.25	1.5	2	2	3	2	2	1.5

- Barro, Robert. "Economic Growth in a Cross Section of Countries," *Quarterly Journal of Economics*, 1991
- Brian G. Dahlin, The Impact of Education on Economic Growth -Theory, Findings, and Policy Implications, Duke University, pdf from internet.
- Chary, S.N. and Vyasulu, Vinod (2000), Environmental Management an Indian Perspective, Macmillan, New Delhi.
- Education and economic growth, Jonathan Temple\*, Department of Economics, University of Bristol, 8 Woodland Road, Bristol BS8 1TN, pdf from internet.
- Education and Economic Growth, Robert J. Barro, pdf from internet.

- Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
- Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
- Jeroen. C.J.M. van den Berg (1999), Handbook of Environment and Resource Economics, Edward Elgar Publishing Ltd., U.K.
- Painuly, J P, Economic Instruments: Application to Environmental Problems, Working paper no 3, by UNEP from IGIDR, Bombay, 1995.
- Panchmukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
- Pearce, D.W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.
- Psacharopoulos, G. 1973. Returns to Education: An International Comparison. Amsterdam: Elsevier.
- Schultz, T.W. (1971), Investment in Human Capital, Free Press, New York.
- Value of Life, Value of Time, and Costant Relative, Blaug, M. (1972), Introduction to Economics of Education, Penguin, London.
- World Bank (1993), The World Development Report, 1993: Investing in Health, Oxford University Press, New York.

# Master of Science Economics(Honors)5-year integrated Semester-IV Statistics For Economics-II CC10-IN-ECX-403

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) Probability-Basic Concepts,	Aims at introducing the students about
Definitions-Classical and Statistical	probability, addition, multiplication theorems
Definition, Theorems of Probability:	
Addition Theorem, Multiplication	
Theorem and Bay's Theorem	
	(i-b)
(i-b) Probability Distribution: Binomial,	aims at making the students acquainted with
Poisson and Normal Probability	nature of discrete and continuous probability
Distribution and their Properties	distributions
UNIT-2	(ii-a)
(ii-a) Sampling and Sampling Distribution:	
Some Basic Concepts, Method of	Has the objective of giving exposure about
Sampling- Census and Sample Method,	sampling and methods and concept of sampling
Sampling and Non Sampling Errors,	distribution
Sampling Distribution	
	(ii-b)
(ii-b)Tests of Hypothesis: Large-Sample	
Tests- Basic Concepts of Hypothesis	Has the objective of acquainting pupils about
Testing and Small Sample Tests-t-test,	statistical inference and testing of hypotheses,
Fisher's Z-test and F-test.	large sample and small sample tests.
UNIT-3	iii-a
(iii-a) Chi-Square Test	aims at developing understanding in students'
	mind about Chi square tests, its applications.
(iii-b) Other Non-Parametric Tests-Sign	iii-b
Test, Wilcoxon Signed Rank Tests, Mann-	has the objective of making the understanding of
Whitney U-test, Kruskal-Willis Test.	various non-parametric tests

#### UNIT-4

(iv-a)Statistical Estimation Theory: Properties of Good Estimator, Applications of Point Estimation, Interval Estimation for Small Samples

(iv-b) Statistical Decision theory: Elements of Decision Problem, Decision Criteria, Applications of Decision Making Under Risk and Decision Tree; Statistical Quality Control (S.Q.C.): meaning, Definition, advantages and Methods of S.Q.C., Control Chart, Types of Control Charts.

## iv-a

has the objective of describing and explaining the basics of point and interval estimation, and criteria of good estimators

#### iv-b

Aims at explaining the relevance and rationale of decision;under risk and uncertainty, and quality control..

# OVERVIEW OF OUTCOMES CORE COURSE- STATISTICS FOR ECONOMICS-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.403.1 Have knowledge about the concept of probability and Probability distributions

Ecx.403.2 Have understanding about sampling theory, and testing of Hypotheses.

Ecx.403.3 Have knowledge about non-parametric tests of significance

Ecx403.4 Have understanding about basic elements of decision theory and statistical quality control

## CORE-COURSE- Statistics for Economics-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.403.1	3	3	1	2	1	2	1	3	2	2	1
Ecx403.2	3	3	2	2	1	1	2	3	2	2	1
Ecx403.3	3	3	1	3	2	1	1	3	2	2	2
Ecx403.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	.25

- Cocharm, W. G., Sampling Techniques, John Willey, New York.
- Gupta S. C. Fundamentals of statistics, Himalaya Publishing house, New Delhi.
- Gupta S.C. and V.K. Kapoor, Fundamentals of Applied Statistics, S. Chand and Sons New Delhi.
- Gupta S.P. and Gupta M. P. Business statistics, Sultan chand and sons, New Delhi.
- Hansen, Hurditz and Meadow, Sample Survey Methods and Theory, John Willey New York.
- Horace Secrist: Readings and Problems in statistical methods; Macmillan
- Kamenta J. Elements of Econometrics, Machmillan Publishing Co., Inc. New York.
- Murray.R Spiegel: Statistics; Schaum Outline Series
- Speigal, M. R. Theory and Prodblems of Statistics, McGraw Hill Book, London § Croxton,

- F. E., D. Cowden and S. Kliein, Applied General Statistics, Prentice Hall, New Delhi.
- TR Jain, SC Aggarwal, RK Rana: Basic Statistics for Economists; VK Publication

## Master of Science Economics(Honors)5-year integrated Semester-IV Indian Economy-II GE4-IN-ECX-404

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) National Income of India: Trends,	Aims at introducing the students about National
Estimation and Distribution	Income of India, trends and composition
(i-b) Structural changes	(i-b)
in Indian Economy-Changes in Occupational pattern and Sectoral distribution of Income	Aims at introducing the students about structural changes in Indian economy w.r.t National income of India
UNIT-2	(ii-a) Has the objective of giving exposure about
(ii-a) Agriculture & Industry in India:	Agriculture, trends in productivity
Nature& Importance; Trends in AgriculturalProduction & productivity (ii-b) Green Revolution, Latest Agricultural Policy in India; Industrialization in India; Latest Industrial Policy.	(ii-b) Has the objective of acquainting pupils about latest agricultural policy and Industrial policy measures.
UNIT-3	iii-a) aims at developing understanding in students' mind about nature of foreign trade
(iii-a)External sector: Balance of Payment since 1991; Composition & Direction of India's foreign Trade	iii-b) has the objective of making the understanding of inward oriented trade policy,
(iii-b) Export promotion & Import	and SEZs as export promotion
Substitution; Special Economic Zones	
(SEZ).	
UNIT-4	

(iv-a)	iv-a) has the objective of describing and
Economic Reforms and Liberalization: The	explaining the background of economic reforms
Origin of Economic Crisis in the Early	and policy initiatives
1990s, Economic Reforms in India	
(iv-b) Macroeconomic Stabilisation,	iv-b
Structural Reforms in India.	Aims at explaining the nature of macroeconomic
	stabilization, and latest structural reforms in india

# OVERVIEW OF OUTCOMES GE COURSE- Indian Economy-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.404.1Have knowledge about the distinguishing features of National Income of India , its trends

Ecx.404.2 Have understanding about the significance of Agriculture and industry; latest and agri policy initiatives.

Ecx.404.3 Have knowledge about Foreign trade, its trends and trade policy measures.

Ecx404.4 Have understanding abouteconomic and structural reforms in India, and the present position

## GE-COURSE- INDIAN ECONOMY-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx404.1	3	3	1	2	1	2	1	3	2	2	1
Ecx404.2	3	3	2	2	1	1	1	3	2	2	2
Ecx404.3	3	3	1	3	2	1	2	3	2	2	2
Ecx404.4	3	3	1	2	2	2	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.5	1.5	3	2	2	1.5

- Kapila Uma Indian Economy Academic Foundation New Delhi Latest Edition.
- Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
- Bardha, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
- Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
- Goel, MM (2011): Economics of Human Resource Development in India, VK Global Publications, New Delhi
- Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
- Government of India, Planning Commission; Five Year Plan Development.
- Jalan, B. (1992), The Indian Economy Problems and Prospects, Viking, New Delhi.
- Jalan, B. (1996), India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.

- Mishra S.K.and Puri V.K, Indian Economy Himalya Publication House Latest Edition.
- Monga G.S.and Goel M.M. (2001) Wage Goods Approach and Development Deep and Deep New Delhi.
- Parikh, K.S. (1999), India Development Report 1999-2000, Oxford University Press, New Delhi.
- Reserve Bank of India, Report on Currency and Finance, (Annual).
- Rudar Dutt and Sundram; Indian Economy S Chand and Company Latest Edition
- Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda for 21st Century (Essays in honour of Prof. P.R. Brahmananda), Deep & Deep Publications, New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-V Basic Econometrics CC11:IN-ECX-501

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
	Aims at introducing the students to econometrics,
(i-a) Nature and scope of econometrics;	and econometric models and methodology
Methodology of econometric research;	
Desirable properties of an econometric	(i-b)
model	aims at making the students understand the
(i-b) Random variables and sampling	random variables in sampling theory, and
theory (only review); Covariance,	implications of covariance of variables
variance, and correlation.	
UNIT-2	(ii-a)
(ii-a)Nature of the regression analysis;	Has the objective of giving exposure about
Two variable regression analysis: Some	regression analysis, and indepth meaning of
basic ideas; Assumptions of the linear	assumptions of linear regression model
stochastic regression model;	(ii-b)
(ii-b)Distribution of the dependent variable	Aims at introducing students about regression by
Y; Problem of estimation: The least square	least square approach, and distribution of the
criterion and normal equations.	explained variable
UNIT-3	iii-a
OIVII 3	aims at developing understanding in students'
(iii-a)Test of the goodness of fit with R <sup>2</sup> ;	mind about relationship of goodness of fit with R
Tests of the significance of parameter	squared, ;tests, mean and variance of OLS
estimates: Mean and variance of the OLS	estimates, and behavior of error term
estimates; Variance of the random variable	,
(iii-b) Sampling distribution of the OLS	iii-b
estimates (standard error test, Z test and	has the objective of detailing about sampling
student's t test); Confidence intervals for	distribution of OLS estimates, and intervals

OLS estimates; Test of significance for sample correlation coefficient.

## UNIT-4

(iv-a)Desirable properties of estimators; Properties of OLS estimators; Second order tests of the assumptions of linear regression model: The assumption of the randomness of u, The assumption of zero mean of u, The assumption of normality of u (iv-b)

The problem of Heteroscedasticity, Autocorrelation and Multicollinearity (Nature, causes and consequences). estimates, also test for sample correlation coefficient.

iv-a

has the objective of describing and explaining the basics of desirable properties of estimators, test of OLS assumptions

iv-b

Aims at explaining the relationship of reliability of estimates in the presence of Heteroscedasticity, autocorrelation and multicollinearity, implications.

## **OVERVIEW OF OUTCOMES**

**CORE COURSE- Basic Econometrics** 

After the successful completion of the course, the students will be able to Course Objective #

Ecx.501.1 Have knowledge about the basics of econometrics, econometric models

Ecx.501.2 Have understanding of nature of regression analysis, with regard to its assumptions, and least square method

Ecx.501.3 Have knowledge about tests of significance of parameter Estimates, and sampling distribution of the estimates, tests

Ecx501.4 Have understanding about basic elements of Best Linear Unbiased efficient estimates, problems of autocorrelation, Multi-collinearity and heteroscedasticity

## CORE-COURSE- BASIC ECONOMETRICS

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx501.1	3	3	1	2	1	2	1	3	2	2	1
Ecx5012	3	3	2	2	1	1	1	3	2	2	1
Ecx5013	3	3	1	3	2	1	2	3	2	2	2
Ecx501.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.25	3	2	2	1.25

- Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge, Mass.
- Baltagi, B.H. (1988), Econometrics, Springer, New York.
- Goldberger, A.S. (1998), Introductory Econometrics, Oxford University Press, New York.
- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition) MC Graw Hill New Delhi.
- Intrilligator, M.D. (1978), Econometric Methods, Techniques and Applications, Prentice Hall Englewood Cliffs, New Jersey.
- Johnson J. (1991), Econometric Methods, MCGraw Hall Book Co. London
- Kmenta J. (1998), Elements of Econometrics, University of Michigan Press, NewYork

- Koutsoyiannis, A. (1977), Theory of Econometrics, The Macmillan Press Ltd. London
- Maddala G.S.(Ed) (1993), Econometric Methods and application, Aldershot U.K.
- Pindyck R.S. and D.L. Rubinfield (1976), Econometric Models and Economic Forecasts, MCGraw Hill Kogakusha Tokyo
- Theil H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi

# Master of Science Economics(Honors)5-year integrated Semester-V Development Economics-1 CC12-IN-ECX-502

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
	Aims at introducing the students about growth
(i-a) Growth and Development	and development, distinction between the two in
Meaning of Economic Growth and	nature and features.
Development, Features of Developing and	(i-b)
Developed Countries, Concepts of	aims at making the students understand the
Development,	measurement of economic development in terms
	of HDI, PQLI., and roadblocks in path of
(i-b) Measuring Economic Development:	development
Income Measure, Physical Quality of Life	
Index (PQLI) and Human Development	
Index (HDI), Determinants and Obstacles	
to Economic Development	
UNIT-2	(ii-a)
(ii-a)	Has the objective of giving exposure about Smith
Classical Theories of Economic	and Ricardo's views on economic development
Developmen Adam Smith: Role of Capital	process, and its determinants
Accumulation, Division of Labour,	
Natural Law and Stage of Stationary State,	
Theory of Value; Ricardian Theory of	(ii-b)
Economic Development: Dynamic system	Aires et inter desires et de ute de set Colores et e
of Ricardo, Theory of Rent and Grades of	Aims at introducing students about Schumpeter
Land	and Marx's views on development process, and its determinants
(ii-b)	its determinants
Schumpeter: Dynamic Process,	
Technology, Entrepreneur, Bank Credit;	
Karl Marx: The Materialistic Interpretation	
	1

	<u> </u>
of History, The Theory of Surplus Value,	
Destruction of Capitalistic Process	
UNIT-3	iii-a
	aims at developing understanding in students'
	mind about role of Agriculture in economic
(iii-a) Sectoral Aspects of Development	development w.r.t. India
Role of Agriculture in Economic	
Development, Green Revolution,	iii-b
Problems of Agriculture Development;	has the objective of detailing about
(iii-b) Rationale and Pattern of	Industrialisation and its role in economic
Industrialization in Developing Countries,	development w.r.t India, and terms of trade
Terms of Trade between Agriculture and	between the two sectors
Industry	
UNIT-4	iv-a
	has the objective of describing and explaining the
(iv-a)Economic Development and Human	basics of contribution of manpower planning in
CapitalMan Power planning: Meaning,	economic development
Objectives and Methodology of Man	
Power planning, Man Power Problems and	iv-b
Man Power Planning in LDCs	Aims at explaining the relationship of human
_	capital formation and sustainable development in
(iv-b)Human Capital Formation and Policy	context of Indian economy
Issues, Sustainable Development with	
special reference to India	

# OVERVIEW OF OUTCOMES CORE COURSE- Development Economics-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.502.1Have knowledge about the basics of Economic developmentand economic growth, measurement by revised standards

Ecx.502.2 Have understanding of nature of development process in the shape of theories of Smith, Ricardo, Schumpeter and Marx

Ecx.502.3 Have knowledge about significance of role of Agriculture and industry in economic development in general, and w.r.t India

Ecx502.4 Have understanding about basic elements of manpower Planning, and human capital formation, and role in economic Development for developing countries in general, and for India in particular

## CORE-COURSE- DEVELOPMENT ECONOMICS-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx502.1	3	3	1	2	1	2	1	3	2	2	1
Ecx502.2	3	3	2	2	1	1	1	3	2	2	1
Ecx502.3	3	3	1	3	2	2	2	3	2	2	2
Ecx502.4	3	3	1	2	2	1	2	3	2	2	1

Average	3	3	1.25	2.25	1.5	1.5	1.5	3	3	2	1.25

- Chakravarti, S. (1987), Development Planning: The Indian Experience, Clarendon Press, Oxford.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development
- Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Development, (3rd Edition), W.W. Norton, New York.
- Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of
- Grossman, G. and E. Helpman (1991), Innovation and Growth in the Global Economy, MIT Press, Cambridge, Mass.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Hirschman, A.O. (1958), The Strategy of Economic Development, Yale University Press, New York.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M. and J.E.Rauch (2005), Leading Issues in Economic Development, (8<sup>th</sup> Edition), Oxford University Press, New Delhi.
- Nayyar, D. (Ed.) (1994), Industrial Growth and Stagnation: The Debate in India, Oxford University Press, New Delhi.
- Sen, A. (1992), Inequality Reexamined, Oxford University Press, Oxford.
- Sen, A.K.(Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Sen, A. (1983), Poverty and Famines, Oxford University Press, Oxford.
- Thirlwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), Economic Development, Pearson Education, Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-V History of Economic Thought DSE1-IN-ECX-503

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Learning objectives
Learning objectives
(i-a) Aims at introducing to the students
about economic thoughts of A Smith and D
Ricardo on growth, distribution, and foreign
trade
(i-b)
aims at making the students understand ideas
of Malthus and Marx on growth of
population and economic growth
(ii-a)
Has the objective of giving exposure about
neoclassical economic though with Marshall
as a great synthesizer, and Conceptual
framework of Keynesian economics
(ii-b)
Aims at introducing to students about
Development economists-Hicks and
Samuelson
iii-a
aims at developing understanding in
students' mind about economic ideology of
Cambridge school and Chicago school of
thought
iii-b
has the objective of detailing about the

	ideology oriented toward mathematical approach by Jevons, Walras and Pareto
UNIT-4	iv-a
(iv-a)Indian economic Thought- Kautilya: wealth, Divisions of economics, Production, Agriculture, Trade, Public Finance and Economic Functions of State; M.K.Gandhi:	has the objective of describing and explaining the basics of contribution of Indian thinkers viz Kautilya and Gandhi
Economic Philosophy and ideas, Socialism, The Sarvodaya Plan	iv-b Aims at discussing the economic thoughts of
(iv-b) VKRV Rao: Economic Planning and their economic thoughts; Amartya Sen: Social Welfare and economic justice, poverty Index.	VKRV Rao and Amartya Sen

## OVERVIEW OF OUTCOMES

DS ELCETIVE- History of Economic Thought

After the successful completion of the course, the students will be able to Course Objective #

Ecx.503.1 Have knowledge about the basic ideology of Classical economists

Ecx.503.2 Have understanding of evolution of neoclassical ideology Keynesian economics and development economics of Hicks And Samuelson

Ecx.503.3 Have knowledge about evolution of economic thought by Cambridge school, Chicago school, and mathematical school

Ecx503.4 Have understanding about basic elements of Indian economicthought ranging from Kautilya, Gandhi, VKRV Rao to Sen

#### DS ELECTIVE- HISTORY OF ECONOMIC THOUGHT

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx503.1	3	3	1	2	1	2	1	3	2	2	1
Ecx503.2	3	3	2	2	1	1	1	3	2	2	1
Ecx503.3	3	3	1	3	2	1	1	3	2	2	1
Ecx503.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1	3	2	2	1

- Blackhouse, R.E:Truth and Progress in Economic knowledge.
- Blaug, M:Economic Theory in retrospect Schumpeter, J:History of economic analysis O'Brien, D.P:Classical Economists.
- Hunt EK: History of economic thought, India ed. Shilpi Publications, Delhi
- Paul, RR: History of economic thought, India, Kalyani Publishers, New Delhi.

# Master of Science Economics(Honors)5-year integrated Semester-V Communication Skills for Economists DSE1-IN-ECX-504

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

## Note:

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted

(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) Introduction-Business	Aims at introducing to the students about Business
Communication; Basic Forms of	Communication and communication process
communicating, Communication process	
	(i-b)
(i-b) Effective communication, Audience	aims at making the students understand about effective
Analysis.	communication, and Audience analysis
	(ii-a)
UNIT-2	
(ii-a)	Has the objective of giving exposure about self –
Self-development & Communication:	development and positive personality attributes
development of positive personal attitudes,	
SWOT analysis	(ii-b)
(ii-b)	
Whole communication. Body Language:	Aims at introducing to students about Holistic view of
kinesics, Proxemics, Para-language.	communication; body language and effective listening
Effective listening: Principles of effective	
listening; Factors affecting listening;	
Exercise-oral, written& video sessions.	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students' mind about
	corporate communication and communication barriers
Corporate communication: formal & informal communication network,	
Business	
miscommunication(barriers), Improving	
communication	
(iii-b)	iii-b
(111-1)	has the objective of detailing about the Group discussions,

Practices in business communication; Group discussions; Mock Interviews; Seminars; Effective listening exercises; Individual& group presentation; Art of	Mock interviews, report writing, and art of interviewing
interviewing and Report writing	. -
UNIT-4	iv-a
<ul><li>(iv-a)</li><li>Modern Forms of communication: e-mail,</li><li>Fax, SMS, Video- conferencing</li><li>(iv-b)</li><li>Communication for the Disabled:</li></ul>	has the objective of describing and explaining the basics of modes of modern communication  iv-b Aims at discussing the introductory knowledge about Braille and ASL
Introduction to Braille and American Sign Language	

## **OVERVIEW OF OUTCOMES**

DS ELECTIVE- Communication Skills for The Economists

After the successful completion of the course, the students will be able to Course Objective #

Ecx.504.1 Have knowledge about thebasics of communication process and effective business communication

Ecx.504.2 Have understanding of positive personality traits and , holistic analysis of expressions through body language

Ecx.504.3 Have knowledge about corporate communication practices barriers, and communication practices viz discussions and interviews

Ecx504.4 Have understanding about basic modes of modern Communication and communication modes for the disabled

## DS ELCETIVE- COMMUNICATION SKILLS FOR THE ECONOMISTS

CO#	PO	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
	1										
Ecx504.1	3	3	1	2	1	2	1	3	2	2	3
Ecx504.2	3	3	2	2	1	1	3	3	2	2	3
Ecx504.3	3	3	1	3	2	1	1	3	2	2	3
Ecx504.4	3	3	1	2	2	1	2	3	2	2	3
Average	3	3	1.25	2.25	1.5	1.25	1.75	3	2	2	3

## **Suggested Reading List**

• Bovee & Thill: Business communication Today, Tata- McGraw Hill, New Delhi.

- Randall E. Magors: Business Communication; Harper& Row, New York
- Ronald E. Dulek and John S Fielder: Principles of Business Communication; McMillan Publishing company, London
- Webster Guide to Effective Letter-writing, Harper& Row, New York

# Master of Science Economics(Honors)5-year integrated Semester-V Economics of Health And Education DSE2-IN-ECX-505

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

## Note:

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the

(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) Role of Health and Education in	Aims at introducing to the students about health
Human Development: Importance in	and education as stimulants to human
poverty alleviation	development, and poverty alleviation
	(i-b)
(i-b) health and education outcomes and	aims at making the students understand about
their relationship with macroeconomic	health and education outcomes and economic
performance	development
	(ii-a)
UNIT-2	Has the objective of giving knowledge about
(ii-a) Health Sector in India: Overview;	health sector of India and indicators of health
Health outcomes	quality
(ii-b) healthcare systems; health financing.	
	(ii-b)
	Aims at introducing to students about Health care
UNIT-3	systems and funding of healthcare infrastructure
	iii-a
(iii-a) Education: Investment in Human	aims at developing understanding in students'
Capital: Rate of return to education: private	mind about education as investment in human
and social; quality of education;	capital, and quality of education
(iii-b) Signalling of human capital;	
theories of discrimination; gender and	iii-b
caste discrimination in India.	has the objective of detailing about the return of
UNIT-4	education as asset; problems of discrimination
UN11-4	iv-a
(iv-a)Education Sector in India: Overview;	has the objective of describing and explaining the
(IV-a) Education Sector in India. Overview,	

Literacy rates, school participation, school quality measures (iv-b)	basics of education sector; school education iv-b Aims at discussing the role of higher education
Role of Higher Education and Vocational Education in India; Skill India campaign	and skill creation.

#### **OVERVIEW OF OUTCOMES**

## DS ELECTIVE- ECONOMICS OF HEALTH AND EDUCATION

After the successful completion of the course, the students will be able to Course Objective #

Ecx.505.1 Have knowledge about the basics of role and outcomeseducation and health w.r.t. economic development

Ecx.505.2 Have understanding of healthcare systems and funding of health infrastructure

Ecx.505.3 Have knowledge about education as investment in human Resources, and problem of discrimination

Ecx505.4 Have understanding about school and higher education In India and skill creation campaign

## DS ELCETIVE- ECONOMICS OF HEALTH AND EDUCATION

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx505.1	3	3	1	2	1	2	3	3	2	2	1
Ecx505.2	3	3	2	2	1	1	2	3	2	2	2
Ecx505.3	3	3	1	3	2	1	3	3	2	2	1
Ecx505.4	3	3	1	2	2	1	3	3	2	2	2
Average	3	3	1.25	2.25	1.5	1.25	2.75	3	2	2	1.5

- Institute Development Studies, 1999.
- Mishra S.K.and Puri V.K, Indian Economy Himalya Publication House Latest Edition.
- Monga G.S. and Goel M.M. (2001) Wage Goods Approach and Development Deep and Deep New Delhi.
- Parikh, K.S. (1999), India Development Report 1999-2000, Oxford University Press, New Delhi.
- Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics:
- Sen, A. (1992), Inequality Reexamined, Oxford University Press, Oxford.
- Sen, A.K.(Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Sen, A. (1983), Poverty and Famines, Oxford University Press, Oxford.
- Theory and Public Policy, Addison Wesley, 2005
- Thirlwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), Economic Development, Pearson Education, Delhi.
- William, Jack, Principles of Health Economics for Developing Countries, World Bank
- World Development Report, Investing in Health, The World Bank, 1993.

# Master of Science Economics(Honors)5-year integrated Semester-V PUBLIC ECONOMICS DSE-2-IN-ECX-506

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	(i-a)
	Aims at introducing to the students about health
(i-a) Economic rationale of Mixed	and education as stimulants to human
Economy; Role of govt in a state,	development, and poverty alleviation
Introduction to positive and tools of	
normative analysis: Pareto efficiency,	(i-b)
equity and the social welfare function	aims at making the students understand about
	health and education outcomes and economic
(i-b) Fiscal federalism, the economic	development
basis of decentralisation: the Tiebout	
Hypothesis: voting with your feet	
UNIT-2	(ii-a)
(ii-a) Public goods: definition, models of efficient allocation: Lindahl model( in brief)	Has the objective of giving knowledge about health sector of India and indicators of health quality  (ii-b)
(ii-b)	A :
Samuelson model of efficient allocation (in brief), pure and impure public goods, free riding problem.	Aims at introducing to students about Health care systems and funding of healthcare infrastructure
UNIT-3	iii-a
(iii-a)	111-a
Externalities: The problem and its	aims at developing understanding in students'
solutions, taxes versus regulation,	mind about education as investment in human
	capital, and quality of education
(iii-b)	

Property rights, the Coase Theorem(in brief).Inverted-U Kuznets curve hypothesis.

UNIT-4

(iv-a)Indian Tax system, Recent reforms, Public Expenditure, Public debt, deficits and subsidies in the Indian economy

(iv-b) Centre-State financial relations, Recommendations of 15th finance Commission.

has the objective of detailing about the return of education as asset; problems of discrimination

iv-a

has the objective of describing and explaining the basics of education sector:school education

iv-b

Aims at discussing the role of higher education and skill creation.

## **OVERVIEW OF OUTCOMES** DS ELECTIVE- PUBLIC ECONOMICS

After the successful completion of the course, the students will be able to Course Objective #

Ecx.506.1 Have knowledge about the basics of efficiency and equity and rationale of fiscal federalism

Ecx.506.2 Have understanding of nature of public goods and efficient allocation of public goods

Have knowledge about externalities and property rights Ecx.506.3

w.r.t public choice

Ecx506.4 Have understanding about Indian tax system, recent reforms, Public debt and public expenditure, centre-state financial relations

#### DS-ELCETIVE- PUBLIC ECONOMICS

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx506.1	3	3	1	2	1	2	1	3	2	2	1
Ecx506.2	3	3	2	2	1	1	2	3	2	2	2
Ecx506.3	3	3	1	3	2	2	2	3	2	2	2
Ecx506.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.5	1.75	3	2	2	1.5

- Arrow Kenneth, J. (1963), Social Choice and Individual Value, Yale University Press, New Haven
- Atkinson A. B., and Siglitz J. E. (1980), Lectures on Public Economics, Tata MacGraw Hill, New York.
- Bagchi, Amaresh (2005) Reading in Taxation, Oxford Press.

- Baumo, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
- Bruce, Neil, Public Finance, Addison-Wesley Educational Publishers, Inc).
- Buchanan, J. M. (1970), The Public Finances, Richard D.li-win, Homewood.
- Chelliah, Raja J.(ED.) 1997, Towards, Sustainable Growth, Oxford University Press, New Delhi.
- Cullis, John and John Philip (2010), Public Finance and Public Choice, IIIrd Edition, Oxford University Press, Oxford.
- DK Khatri:Investment Management & Security Analysis: Text and Cases; McMillan India
- DK Khatri: Investment Management & Security Analysis: Text and Cases; McMillan Indian
- Dornbusch R., Fischer and Startz (1998), Macroeconomics, McGraw Hill, New York
- Downs, A, An Economic Theory of Democracy, Harper and Row, New York.
- Goode R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
- Harberger, Arnold, C. (1966); Efficiency Effects of Taxes on Income from Capital; Effects of Corporation Income Tax, Wayne State University Press, Detroit.
- Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
- IM Pandey:Financial management
- Jha, R. (1998), Modern Public Economics, Routledge, London.
- Khan and Jain: Finacial Management Fouth Ed. Tata Mcgraw Hill.
- Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers, Vol. 1
- Menutt, P. (1986), The Economics Of Public Choice, Edward Elgar, London.
- Mishan E. J.(1982), Cost-Benefit Analysis: An Informal Introduction, George llen and znwin, London.
- Mueller, Dennis, C. (2003), Public Choice III, Cambridge University Press
- Musgrave R. A. and Musgrave P. B. (2001),
   McGraw Hill Book Company, New Delhi.

  Public Finance in Theory and Practice,

# Master of Science Economics(Honors)5-year integrated Semester-V International Trade-1 GE5-IN-ECX-507

External marks:120 Internal Marks:30 Time: 3 hours Credit:6

## Note:

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will attempt 1 out of 2 questions from each of the students will be studen

(iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Content	Learning objectives
UNIT-I	Learning Objectives
UNII-I	
<ul><li>(i-a) International trade: contents of international trade; Need for a separate theory;</li><li>(i-b) Distinguishing features of international trade; Importance: Advantages and Dis-Advantages of</li></ul>	(i-a) Aims at introducing the students about Internationa trade, and rationale for a separate theory (i-b) aims at making the students acquainted with nature and significance of international trade in
international trade; Trade as engine of	economic development
growth	
	(ii-a)
UNIT-2	
(ii-a)	Has the objective of giving exposure about
Classical Theory of International Trade: –	theories of International trade from classical
Theories of absolute advantage,	perspective
comparative advantage.	
	(ii-b)
(ii-b)	
Neo Classical Theory of international	Has the objective of acquainting pupils about
Trade (opportunity costs theory); Modern	opportunity costs theory and factor proportions
Theory of International Trade (Heckscher-	theory
Ohlin Model ).	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students'
	mind about Role of reciprocal demand in
Alternative theories of international trade:-	determining trade volume and direction iii-b
The Leontief Paradox; Offer curve	III-U
analysis; J.S. Mill's theory of reciprocal	

demand; (iii-b)	has the objective of making the understanding of factor price equalization theorem, and specific
Factor price equalization theorem; The specific factors model.	factors model
UNIT-4	iv-a
(iv-a)Tariff and Non Tariff Barriers:- Partial and General equilibrium analysis of tariff;	has the objective of describing and explaining the basics of tariffs and their effects
(iv-b) Import Quota and other Non tariff barriers; Arguments for protection; Concepts of terms of trade, their uses and limitations	iv-b Aims at explaining the relevance and rationale of quotas and their effects, also the nature and significance of terms of trade.

## OVERVIEW OF OUTCOMES GE- INTERNATIONAL TRADE-1

After the successful completion of the course, the students will be able to Course Objective #

Ecx.507.1 Have knowledge about the distinguishing features of

International trade, and rationale for a separate theory

Ecx.507.2 Have understanding about the Theories of international trade

Ecx.507.3 Have knowledge about trade theories based on reciprocal

and specific factors

Ecx507.4 Have understanding about basic elements of tariffs and quotas

, and terms of trade.

#### GENERIC ELECTIVE- INTERNATIONAL TRADE-1

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx.507.1	3	3	1	2	1	2	1	3	2	2	1
Ecx507.2	3	3	2	2	1	1	2	3	2	2	1
Ecx507.3.	3	3	1	3	2	1	1	3	2	2	2
Ecx507.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1.25

- Bhagwati J. (1988), Protectionism, Cambridge University Press, Mass.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.
- Carbough, R.J. (1999), International Economics, International Thompson Publishing, New York
- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study, Guide and Work Book, (5th

- Edition), Routledge Publishers, London.
- Dunn R.M. adn J.H. Mutt (2000), International Economics, Routledge, London.
- Gallaway, M.C., Blonigen, B.A., and J.E. Flynn, (1999), "Welfare Costs of the US Antidumping and Countervailing Duty Laws", Journal of International Economics, 49, 211-214.
- Goldsten, M. (1998), The Asian Financial crisis: causes cure and systematic implications, Institute of International Economics, Washington D.C.
- Hufbauer G.C. and K.A. Elliott (1994), Measuring the Costs of Protection in the United States, Institute for International Economics.
- Jackson, J. (1989), The World Trading System, Cambridge University Press, Mass.
- Joshi, V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
- Krugman, P.R. and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.
- Maggi, G. and A. Rodriguez-Clare (1998), "The Value of Trade Agreements in the Presence of Political Pressures," Journal of Political Economy, 106, 574-601.
- Mishkin, S.F. (1998), The Economics of Money, Banking and Financial Markets, (5th Edition), Harper Colins Publishers, New York.
- Miyagiwa, K. and Y. Ohno (1995), "Closing the Technology Gap Under Protection," American Economic Review, 85, 755-770.
- Panagariya, A. (2000), "Preferential Trade Liberalization: the Traditional Theory and new Developments," Journal of Economic Literature, 38, 287-331.
- Panchamukhi V.R. and R. Tandon (1987), Money and Finance in World Economic Order (RIS), Indus Publishing Co. Delhi.
- Panchmukhi, V.R. (1978), Trade Policies of India–A Quantitative Analysis, Concept Publishing Company, New Delhi.
- Patel, S. J. (1995), Indian Economy Towards the 21st Century, University Press Ltd., India.
- Pomfert, R. (1988), Unequal Trade: The Economics of Discriminatory International Trade Policies, Blackwell Publishers, Oxford.
- Satyanarayan, B. (1986), India's Trade with Asia and the Far East Countries, B.R. Publishing Corp., New Delhi.
- Sodirston, Bo. (1991), International Economics, The Macmillan Press Ltd. London. Feenstra, R.C. (1992), "How Costly is Protectionalism?," Journal of Economic Perspectives. 6, 159-178.
- Vanderbussche, H. and M. Zanardi (2006), "The Global Chilling Effects of Antidumping Proliferation," CEPR Discussion paper. 5597.

# Master of Science Economics(Honors)5-year integrated Semester-VI Economics of Finance CC13-IN-ECX-601

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Tour units (24 marks each)	T
Content	Learning objectives
UNIT-I	(i-a)
(i-a) Nature, Scope and Objective of	Aims at introducing to the students about Nature,
Financial Economics;	scope and objectives of financial economics
	(i-b)
(i-b) Financial statement: Balance sheet,	aims at making the students understand basics of
Profit & Loss Account and ratio analysis;	financial statements, and time value of money
Time value of money	
UNIT-2	(ii-a)
(ii-a)	
	Has the objective of giving exposure to students
Capital Budgeting Decisions: Net Present	about Capital budgeting and its methods
Value, IRR, Profitability Index, Payback	
	(ii-b)
(ii-b)	
Corporate Restructuring: Mergers,	Aims at introducing to students about Corporate
Acquisitions, Amalgamations,	strategies of restructuring, and corporate
Divestments-Meaning, Motives And	governance
Strategies; Corporate Governance.	
UNIT-3	iii-a
(iii-a)	aims at developing understanding in students'
Cost of Capital: Concept of Risk and	mind about Risk and Return and portfolio theory
Return; Portfolio Theory, Capital Asset	iii-b
Pricing Model	has the objective of detailing about Arbitrage
_	Pricing theory and efficient market hypothesis
(iii-b) Arbitrage Pricing Theory; Efficient	
Market Hypothesis-Basic Concept.	
UNIT-4	iv-a

(iv-a)Capital market in India: brief history (iv-b)  Major reforms in primary and secondary capital market.	has the objective of describing and explaining the Indian capital market in historical perspective iv-b Aims at discussing the primary capital market and
capital market.	stock market reforms in India

#### **OVERVIEW OF OUTCOMES**

**CORE COURSE- Economics of Finance** 

After the successful completion of the course, the students will be able to Course Objective #

Ecx.601.1 Have knowledge about the Financial economics, and financial statements

Ecx.601.2 Have understanding of capital budgeting decisions, and

Corporate restructuring strategies

Ecx.601.3 Have knowledge about Risk and return, portfolio theory and Efficient market hypothesis

Ecx601.4 Have understanding about historical review of Indian capital Market, and capital market reforms

## CORE-COURSE- ECONOMICS OF FINANCE

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx601.1	3	3	1	2	1	2	1	3	2	2	1
Ecx601.2	3	3	2	2	1	1	2	3	2	2	2
Ecx601.3	3	3	1	3	2	1	1	3	2	2	2
Ecx601.4	3	3	1	2	2	1	2	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1.5

- Arrow Kenneth, J. (1963), Social Choice and Individual Value, Yale University Press, New Haven
- Atkinson A. B., and Siglitz J. E. (1980), Lectures on Public Economics, Tata MacGraw Hill, New York.
- Bagchi, Amaresh (2005) Reading in Taxation, Oxford Press.
- Baumo, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
- Bruce, Neil, Public Finance, Addison-Wesley Educational Publishers, Inc).
- Buchanan, J. M. (1970), The Public Finances, Richard D.li-win, Homewood.
- Chelliah, Raja J.(ED.) 1997, Towards, Sustainable Growth, Oxford University Press, New Delhi.
- Cullis, John and John Philip (2010), Public Finance and Public Choice, IIIrd Edition, Oxford University Press, Oxford.
- DK Khatri:Investment Management & Security Analysis: Text and Cases; McMillan

India

- DK Khatri: Investment Management & Security Analysis: Text and Cases; McMillan Indian
- Dornbusch R., Fischer and Startz (1998), Macroeconomics, McGraw Hill, New York
- Downs, A, An Economic Theory of Democracy, Harper and Row, New York.
- Goode R. (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
- Harberger, Arnold, C. (1966); Efficiency Effects of Taxes on Income from Capital; Effects of Corporation Income Tax, Wayne State University Press, Detroit.
- Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
- IM Pandey: Financial Management
- Jha, R. (1998), Modern Public Economics, Routledge, London.
- Khan and Jain: Financial Management Fouth Ed. Tata McGraw Hill.
- Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers, Vol. 1.
- Menutt, P. (1986), The Economics Of Public Choice, Edward Elgar, London.
- Mishan E. J.(1982), Cost-Benefit Analysis: An Informal Introduction, George Allen and Unwin, London.
- Mueller, Dennis, C. (2003), Public Choice III, Cambridge University Press
- Musgrave R. A. and Musgrave P. B. (2001), Public Finance in Theory and Practice, McGraw Hill Book Company, New Delhi.
- Musgrave, R.A., and Peacock A.T., Classics in the Theory of Public Finance, Mcmillan.
- Niskanen, William A. (1971); Bureaucracy and Representative Government, Chicago, Aldine.
- Niskanen, William A. (1994); Bureaucracy and Public Economics.
- Pigou, A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
- Prasanna Chandra: Financial Management; McGraw-Hill
- Prasanna Chandra: Investment management and Portfolio
- Prasanna Chandra: Investment management and Portfolio Analysis; McGraw-Hill
- Rosen, S Harvey and Gayer, Ted (2012), Public Finance, Mcgraw Hill Education.
- Sen Amartya, ; The Possibility of Social Choice, American Economic Review, Vol. 89(3), 1999, PP. 349-378.
- Stiglitz, J.E. (1999), Economics of Public Sector, W.W. Norton & Company, London.

# Master of Science Economics(Honors)5-year integrated Semester-VI Development Economics-II CC14:IN-ECX-602

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

Learning objectives
(i-a)
Aims at introducing to the students about steady
state growth, and neoclassical models.
(i-b)
aims at making the students understand basics of
Capital accumulation model of Robinson and
Kaldor's growth model
(ii-a)
Has the objective of giving exposure to students
about strategies of economic development,
Balanced growth, Big Push and Critical
minimum effort
(ii-b)
Aims at introducing to students about
macroeconomic theories of distribution
iii-a
aims at developing understanding in students'
mind about choice of techniques
iii-b
has the objective of detailing about Investment
criteria and project evaluation

Planning Techniques: Investment Criteria and Cost-Benefit Analysis

UNIT-4

(iv-a) Technical Progress: Capital Saving, Labor Saving and Neutral Technical Progress (Harrod and Hicks); Embodied and Disembodied Technical Progress(Solow and Nelson)

(iv-b)

Theories of Endogenous Growth: AK

Model; Romer

iv-a

has the objective of describing and explaining the kinds of technical progress

iv-b

Aims at discussing the sources of growth and models of endogenous growth

## OVERVIEW OF OUTCOMES CORE COURSE- DEVELOPMENT ECONOMICS-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.602.1 Have knowledge about the Steady-state growth and its path

Ecx.602.2 Have understanding of strategies of economic developmentand macroeconomic theories of distribution

Have knowledge about choice of techniques, investment criteria and cost-Ecx.602.3 benefit analysis

Ecx602.4 Have understanding about Technical progress and sources of economic growth CORE-COURSE- DEVELOPMENT ECONOMICS-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx602.1	3	3	1	2	1	2	1	3	2	2	1
Ecx602.2	3	3	2	2	1	1	1	3	2	2	2
Ecx602.3	3	3	1	3	2	2	2	3	2	2	2
Ecx602.4	3	3	1	2	2	2	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.75	1.25	3	2	2	1.5

- Chakravarti, S. (1987), Development Planning: The Indian Experience, Clarendon Press, Oxford.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins. M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
- Grossman, G. and E. Helpman (1991), Innovation and Growth in the Global Economy,

- MIT Press, Cambridge, Mass.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Hirschman, A.O. (1958), The Strategy of Economic Development, Yale University Press, New York.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M. and J.E.Rauch (2005), Leading Issues in Economic Development, (8<sup>th</sup> Edition), Oxford University Press, New Delhi.
- Nayyar, D. (Ed.) (1994), Industrial Growth and Stagnation: The Debate in India, Oxford University Press, New Delhi.
- Sen, A. (1983), Poverty and Famines, Oxford University Press, Oxford.
- Sen, A.K.(Ed.) (1990), Growth Economics, Penguin, Harmondsworth.
- Sen, A. (1992), Inequality Reexamined, Oxford University Press, Oxford.
- Todaro, M.P. and S.C. Smith (2003), (8th Edition), Economic Development, Pearson Education, Delhi.
- Thirlwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.

# Master of Science Economics(Honors)5-year integrated Semester-VI Research Methodology DSE3-IN-ECX-603

External marks:80 Internal Marks:20 Total Marks:100 Total credits:4 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 10 and 6 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (16 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a)	Aims at introducing to the students scientific
Research methodology:Research, and	method and Research problem.
Scientific method; Identifying and defining	(i-b)
a research problem;	aims at making the students understand the kinds
(i-b)	of research designs
Research Design: Experimental, Ex-post	
facto research: Exploratory, Historical and	
Descriptive, Field study&Case-study,	
Survey research, Case study research.	(ii-a)
UNIT-2	(11-a)
(ii-a)	Has the objective of giving exposure to students
Sample design –probability&Non-	about sample design and measurement scales
probability sampling, Sample size;	acout sumpro usergn una measurement source
Measurement Design-measurement	(ii-b)
scales; errors in measurement, Validity and	
Reliability	Aims at introducing to students about data
(ii-b)	collection, editing and presentation.
Data collection &editing coding;	
Presentation: Graphical&Content analysis	
UNIT-3	iii-a
(iii-a)	
Formulation of Research Problem-Pilot	aims at developing understading of formulation
Study, Literature Survey, formation of	of research problem and hypothesis setting-up
hypothesis	iii-b
(iii-b)	has the objective of acquainting students with
Experimental Research-experimental	single factor and 2-or more factor experimental

designs :Single factor Designs , Two or more factors designs; Randomised Block Design, Latin Square design, Quasiexperimental Designs; Validity&Reliability

## UNIT-4

## (iv-a)

Analysis of Variance for Experimental Data:Single factor Randomised Block Design, Latin square Design, and 2x2 factorial design

## (iv-b)

Thesis writing:Principles; Format of Research reports; Briefing, Rules for Word processing

designs, as well as Quasi-experimental designs

## iv-a

has the objective of describing and explaining the problem-solving of experimental data in different experimental settings under ANOVA iv-b

Aims at giving the knowledge to students about basics of research report writing

## Research Methodology

DSE: IN-ECO-604

Practical
Presentation (written/oral)
External marks:40
Internal marks:10
Total marks:50
Credits:2
Time:3 hours

Measurement scales; ANOVA Problem-solving onRandomised Block design, Latin Square Designs, and 2x2 factorial Design; Writing a research report/Synopsis Data analysis using MS Excel, SPSS and E views.

### OVERVIEW OF OUTCOMES (IN-ECO-603&IN-ECO-604) DS ELECTIVE- RESEARCH METHODOLOGY

After the successful completion of the course, the students will be able to

Course Objective #

Ecx.603&4.1 Have knowledge about the research problem and research

design

Ecx.603&4.2 Have understanding of sample design and data collection

and data editing

Ecx.603&4.3 Have knowledge about experimental and Quasi-experimental

research

Ecx603&4.4 Have understanding aboutANOVA and thesis writing

#### DS-COURSE- RESEARCH METHODOLOGY

CO#	PO1	PO	PO3	PO4	PO5	PO6	PO7	PSO	PSO2	PSO3	PSO4
		2						1			
Ecx603&4.1	3	3	1	2	1	2	1	3	2	2	1
Ecx603&4.2	3	3	2	2	1	1	1	3	2	2	2
Ecx603&4.3	3	3	1	3	2	1	2	3	2	2	2
Ecx603&4.4	3	3	1	2	2	1	1	3	2	2	2
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1.75

- Alexis Leon and Mathews Leon: Introduction to Computers with Ms-Office, TMH.
- Asthana and Brij Bhushan: Statistics for Social Sciences (with SPSS applications), PHI.
- Feeber, R and Verdoorn, P.J.:Research Methodology in Economics and Business

- Foercese, D.P. and Richer, S., Social Research Methods
- Ghosh. B.N., Scientific Methods and Social Research
- Kerns: Essentials of Microsoft Windows, Word and Excel, PHI
- KN Krishnaswamy, Appa I Sivakumar, M Mathirajan, Management Research Methodology, Pearson education, Dorling Kindersley(India)pvt ltd.
- Kothari, CR (1995) *Research Methodology: Methods and Techniques*, Wishwa Prakashan (Wiley Eatern Ltd), New Delhi.
- Kurien, C.T. (ed.), A Guide to Research in Economics
- Raja Raman.V.: Fundamentals of Computers, PHI, New Delhi.
- Ranjeet Kumar. Research Methodology: Sage Publication Ltd
- Sabine, Landau, Brian S. Everitt: A handbook of statistical analyses using SPSS, Chapman & Hall/CRC Press LLC
- Sadhu, A.N. and Singh, Research Methodology in Social Sciences
- Sharma, B.A.U. et. Al., Research Methodology in Social Sciences
- Sinha, P.K.: Computer Fundamentals, BPB Publications, New Delhi
- Spiegel, M.R., Theory and Problems of Statistics (Schaum's outlines Series), Thesis and Assignment Writing
- Wilkinson, T.S. and Bhandarker, P.L., Methodology and Techniques of Social Research
- Yamane, T., Statistics: An Introduction Analysis.

## Master of Science Economics(Honors)5-year integrated Semester-VI Energy Economics DSE3-IN-ECX-605

External marks:80 Internal Marks:20 Total marks:100 Credits:4 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 10 and 6 marks respectively All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (16 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a)	Aims at introducing to the students basic
Some Basic Concepts: Definition of Energy,	concepts relted to Energy, and energy
Measuring Energy; Energy Conversion and	conversion process.
Efficiency, law of Thermodynamics	(i-b)
	aims at making the students understand the
(i-b)	energy indicators and energy-economics
Emergence of Energy Economics: Its nature	relationship
and scope; Energy indicators: Energy &	
Economics relationship.	(ii-a)
UNIT-2	(ii u)
(ii-a)	Has the objective of giving exposure to students
Natural Resources: Types and classification	about the nature and types of energy resources
(Conventional & Non- Conventional);	
Energy Resources: Renewable- Water	(ii-b)
Energy, Solar Energy, Wind Energy and	
Non- Renewable	Aims at introducing to students about thermal
(ii-b)	energy and its EIA
Thermal Energy, Thermal Energy and its	
Environmental Impact Assessment	iii-a
UNIT-3	aims at developing understanding of energy crisis and environmental crisis; and measures
(::: -)	Crisis and chivironmental crisis, and measures
(iii-a)	iii-b
Energy Crisis - causes, consequences - Remedial measures; Environmental Crisis -	has the objective of acquainting students with
causes, consequences, remedial measures	role of international institutions in energy
,,	l

### (iii-b)

Role of International Institutions in Energy and Economic Development-OPEC, OAPEC, IEA and World Bank

UNIT-4

(iv-a)Energy Planning and Energy Conservation: Meaning, objectives and importance - Energy Management -Meaning, Objectives and Importance.

(iv-b) Recent Developments - Energy Auditing - Energy Accounting - Energy Pricing and Taxes - Role of Economists in Promoting Sustainable Energy Management. development

iv-a

has the objective of introducing to the students about Energy planning and energy management iv-b

Aims at giving the knowledge to students aboutrecent energy policy issues in India and sustainable energy use.

# ENERGY ECONOMICS DS IN-ECO-606

Practical
Presentation (written/oral)
External marks:40
Internal marks:10
Total marks:50

Credits:2

Time: 3hours

#### Presentation (written/oral)

Law of thermodynamics, Energy conversion process and efficiency, Energy audit, Energy pricing, Environment Impact Assessment, Sustainable Energy use

#### OVERVIEW OF OUTCOMES (IN-ECO-605&IN-ECO-606) DS COURSE- ENERGY ECONOMICS

After the successful completion of the course, the students will be able to Course Objective #

Ecx.605&6.1 Have basic knowledge about the energy economics,

Thermodynamics and energy conversion

Ecx. 605&6.2 Have understanding of basics of energy resources and

**Environment Impact Assessment of Thermal energy** 

Ecx.605&6.3 Have knowledge about energy crisis and role of international

Institutions for crisis resolution

Ecx605&6.4 Have understanding aboutenergy pricing, energy

audit andsustainable energy use

#### DS-COURSE- ENERGY ECONOMICS

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx605&6.1	3	3	1	2	1	2	1	3	2	2	1
Ecx605&6.2	3	3	2	2	1	1	1	3	2	2	2
Ecx605&6.3	3	3	1	3	2	2	2	3	2	2	1
Ecx605&6.4	3	3	1	2	2	2	1	3	2	2	2
Average	3	3	1.25	2.25	1.5	1.75	1.25	3	2	2	1.5

- 3 I Network (2004): India Infrastructure Report 2004, Delhi, OUP, 2004.
- 3 I Network (2010): India Infrastructure Report 2004, Delhi, OUP, 2010 4. Boyle, G. 1996. Renewable Energy: Power for a Sustainable Future. Oxford: Oxford University Press.
- Button, K.J. (2003) Transport economics, Edward Elgar, Aldershot, England.
- Carol Dahl, (2004).International Energy Markets: Understanding Pricing, Policies, and Profit, Pennwell Press,

- Cooper, J. 2003. Price elasticity of demand for crude oil: estimates for 23 countries. OPEC Review: Energy Economics & Related Issues 27, 1, 1–8.6.
- Cropper, M. and Oates, W. 1992. Environmental economics: a survey. Journal of Economic Literature 30, 675–740.
- Dahl, C.A. (2004) International energy Markets: Understanding Pricing, Policies and Profits, Penn Well.
- Energy and Communications in Transition, MSU Public Utility Papers, 1981
- Ferdinand Banks, Kluwer Academic, (2000) Energy Economics: A Modern Introduction.
- James M. Griffin and Henry B.Steele, (1986), Energy Economics and Policy, 2<sup>nd</sup> ed., by Academic Press.
- Jon Strand(2011): Low-Level Versus High level Equilibrium in Public Utility services, Policy Research Paper 5723
- Michael A. Crew and Paul R. Kleindorfer(1986): The Economics of Public Utility Regulation, MIT Press 1986.
- Steven Stoft, Wiley (2002)Power System Economics: Designing Markets for Electricity.
- W. Fulmer, Robert L. Bradley Jrand Richard (2004), .Energy: The Master Resource.
- William Spangar Peirce, Praeger, (1996). Economics of the Energy Industries, 2<sup>nd</sup> ed.
- World Bank (1994): Infrastructure for Development, World Development Report, Washington D.C.

## Master of Science Economics(Honors)5-year integrated Semester-VI Industrial Economics DSE4-IN-ECX-607

External marks:80 Internal Marks:20 Total marks:100 Credits:4 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 10 and 6 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the computations.
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (16 marks each)

Content	Learning objectives
UNIT-I	(i-a)
(i-a) Nature and scope of Industrial	Aims at introducing to the students about
Economics; Concept and Organization of a	industrial economics and organization and
firm – ownership, control and objectives of	objectives of a firm
the firm	(i-b)
(i-b) Growth of the firm – Size and growth	aims at making the students understand the
of a firm, Diversification & growth,	determinants of size and growth of the firm
growth and profitability, constraints on	
growth	
UNIT-2	(ii-a)
(ii-a)	Has the objective of giving exposure to students
Theories of industrial location – Weber and	about theories of location and limiting factors
Sargent theories, Factors affecting location	
(ii-b)	(ii-b)
Industrial localization and remedial	Aims at introducing to students about factors
measures; Sellers' concentration	leading to localization of industries and sellers'
UNIT-3	concentration
(iii-a)Economies of Scale and scope; Market	iii-a
structure and profitability	aims at developing understanding of role of
Substitute prominently	economies of scale and scope, market structure
(iii-b) Market structure and innovation;	and profits of a firm
Product pricing – theories and evidence	1 0
1 roduct pricing theories and evidence	has the objective of acquainting students with
I D WE 4	product innovation and product pricing practices
UNIT-4	iv-a
( )D : 11 1 (:1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	has the objective of introducing to the students
(iv-a)Regional Industrial growth in India;	about Industrial growth through mergers and

Industrial growth through mergers &acquisitions, and diversification;

## (iv-b)

Industrial Finance; Sources of short term and long term finance; Structure of Industrial labour; Employment dimensions of Indian Industry acquisitions, and product diversification iv-b

Aims at giving the knowledge to students about Industrial finance, and employment potential of Indian industry

# INDUSTRIAL ECONOMICS DS ELECTIVE IN-ECO-608

Practical
Presentation (written/oral)
External marks:40
Internal marks:10
Total marks:50
Credits:2

#### Presentation (written/oral)

Industrial location theories of Sergent and Weber; Market structure; Mergers and Acquisitions, Economies of scale and scope; Pricing practices, Sources of Industrial Finance

OVERVIEW OF OUTCOMES (IN-ECO-607&IN-ECO-608)
DS ELECTIVE- INDUSTRIAL ECONOMICS

After the successful completion of the course, the students will be able to Course Objective #

Ecx.607&8.1 Have basic knowledge about the Industrial Economics and organization of a firm

Ecx.607&8.2 Have understanding of basics of location theories, and localization of industries

Ecx.607&8.3 Have knowledge about Scale and scope economies, market structure and pricing practices

Ecx607&8.4 Have understanding about Industrial growth through Mergers and acquisitions, and sources of industrial finance

#### DS-COURSE- INDUSTRIAL ECONOMICS

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx607&8.1	3	3	1	2	1	2	1	3	2	2	1
Ecx607&8.2	3	3	2	2	1	1	2	3	2	2	1
Ecx607&8.3	3	3	1	3	2	1	2	3	2	2	1
Ecx607&8.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1

- Ahluwalia, I.J. (1985), *Industrial Growth in India*, Oxford University Press, New Delhi.
- Bagchi, A. and M. Banerjee (Eds.) (1979), *Change and Choice in Indian Industry*, Bagchi Publications, Calcutta.
- Bains, J.S. (1996), *Industrial Organization*, Cheltanham, U.K.
- Barthwal, R.R. (1985), *Industrial Economics*, Wiley Eastern Ltd. New Delhi.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (1987), *The Development Process of the Indian Economy*, Himalaya Publishing, Bombay.
- Cherunilam, F. (1994), *Industrial Economics: Indian Perspective* (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), *Industrial Economy in India* (3<sup>rd</sup> Edition), Himalaya Publishing House, Mumbai

- Divine, P.J. and R.M. Jones et. al. (1976), *An Introduction to Industrial Economics*, George Allen and Unwin Ltd., London.
- Government of India, *Economic Survey* (Annual).
- Harndeen, J.B. (1975), *The Economics of Corporate Economy*, Dunellen Publishers, New York.
- Hay, D. and D.J. Moris (1979), *Industrial Economics: Theory and Evidence*, Oxford University Press, New Delhi.
- Jalan, B. (1996), *India's Economy Policy*, Viking, New Delhi.
- Joshi, V. and I.M.D. Little (1999), *India: Macro Economics and Political Economy: 1964-1991*, Oxford University Press, New Delhi.
- Kelkar, V.L. and V.V. Bhnoji Rao (Eds.) (1996), *India Development Policy Imperatives*, Tata McGraw Hill, New Delhi.
- Kemien, M.T. and N.L. Schwartz (1982), *Market Structure and Innovation*, Cambridge University Press, Cambridge.
- Kuchhal, S.C. (1980), *Industrial Economy of India* (5<sup>th</sup> Edition), Chaitanya Publishing House, Allahbad.
- Mamoria and Mamoria (2000), *Dynamics of Industrial Relations in India* (15<sup>th</sup> Edition), Himalaya Publishing House, Mumbai.
- Reserve Bank of India, Report on Currency and Finance (Annual)
- Sen, R. and B. Chatterjee (2001), *Indian Economy: Agenda for the 21<sup>st</sup> Century* (Essays in honour of Professor P.R. Brahmananda), Deep and Deep Publications Pvt. Ltd., New Delhi.

## Master of Science Economics(Honors)5-year integrated Semester-VI Agriculture Economics DSE4-IN-ECX-609

External marks:80 Internal Marks:20 Total marks:100 Credits:4 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 10 and 6 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (16 marks each)

four units (16 marks each)					
Content	Learning objectives				
UNIT-I	(i-a)				
(i-a)	Aims at introducing to the students about agri				
Nature and scope of agricultural and rural	and rural economics and nature of production				
economics; Production functions in	process in agriculture				
Agriculture-Input-output, and product-					
product relationship	(i-b)				
( <b>i-b</b> )	aims at making the students understand the				
Interdependence between agriculture and	interdependence and linkages between				
industry-intersectoral likages (backward &	agriculture and industry				
forward	(: -)				
UNIT-2	(ii-a)				
(ii-a) Models of Agricultural development-	Has the objective of giving exposure to students				
Fei-Rennis model, Schultze model;	about modles of agri-development, nature and role of agri- inputs				
Irrigation, HYV seeds, mechanisation,					
distribution mechanism of output	Total of agri inputs				
	(ii-b)				
(ii-b) New agricultural strategy; and its	Aims at introducing to students about factors				
impact on Income distribution&	leading to Green revolution, and later technical				
Employment	innovations				
UNIT-3					
	iii-a				
(iii-a) Co-operative farming, its evaluation	aims at developing understanding of role of co-				
with regard to productivity, employment,	operative farming, and its impact				
and Income distribution;					
	iii-b				
(iii-b)	has the objective of acquainting students with				
New trends in agriculture: Organic farming,	agri-product innovation and agri- practices				
_					

Zero-tillage, Genetic Engineering in agriculture

UNIT-4

#### (iv-a)

Agricultural markets and marketing, Nature of demand & supply of Agri-products; Regulated markets; Warehousing, crop insurance

#### (iv-b)

Terms of trade between agricultural and non-agricultural sectors; Objectives of agricultural price policy- Instruments and evaluation; Food security in India and Public distribution system and Agri-reforms in India iv-a

has the objective of introducing to the students about nature of agri-markets, and need for agri-infrastructure of storage and crop insurance iv-b

Aims at giving the knowledge to students about terms of trade between agriculture and industry; food security and agri-reforms in India

# AGRICULTURE ECONOMICS DSE IN-ECO-610

Practical Presentation (written/oral) External marks:40 Internal marks:10

Interdependence between agriculture and industry- some empirical evidence, Farm-size & labour productivity Terms of trade between agricultural and non-agricultural sectors; Objectives of agricultural price policy- Instruments and evaluation; Food security in India

### OVERVIEW OF OUTCOMES (IN-ECO-609&IN-ECO-610) DS COURSE- AGRICULTURE ECONOMICS

After the successful completion of the course, the students will be able to Course Objective #

Ecx.609&10.1 Have basic knowledge about the Nature and scope of agriculture economics, and linkages between agriculture and industry

Ecx.609&10.2 Have understanding of basics of models of agridevelopment, and new agricultural strategy and its impact

Ecx.609&10.3 Have knowledge about co-operative farming, and new

Innovative agri-practices in India

 $\label{eq:cx609&10.4} Ecx 609\&10.4 \qquad \qquad Have \ understanding \ about \ Agri-marketing \ , food \ security \\ and \ agri-reforms \ in \ India$ 

#### DS-COURSE- AGRICULTURE ECONOMICS

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx609&10.1	3	3	1	2	1	2	1	3	2	2	1
Ecx609&10.2	3	3	2	2	1	1	2	3	2	2	1
Ecx609&10.3	3	3	1	3	2	1	2	3	2	2	1
Ecx609&10.4	3	3	1	2	2	1	1	3	2	2	1
Average	3	3	1.2	2.25	1.5	1.25	1.5	3	2	2	1
			5								

- Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. al (1991), Indian Agricultural Development Since Independence, Oxford & IBH, New Delhi.
- Gulati, A. and T. Kelly (1999), Trade Liberalisation and Indian Agriculture, Oxford University Press, New Delhi.

- Joshi, P.C. (1975), Land Reforms in India: Trends and Prospects, Allied Publishers, Bombay.
- Rudra, A. (1982), Indian Agricultural Economics: Myths and Reality, Allied Publishers, New Delhi. New Delhi.
- Soni, R.N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
- Harque, T. and A.S. Sirohi (1986), Agrarian Reforms and Institutional Changes in India, Concept Publishing Company, Delhi.
- Raghvan and L. Sarkar (Eds.)(1996), Poverty and Employment, New Age, New Delhi.
- Rao, C.H. Hanumantha (1994), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.

## Master of Science Economics(Honors)5-year integrated Semester-VI International Trade-II GE6-IN-ECX-611

External marks:120 Internal Marks:30 Total marks:150 Credits:6 Time: 3 hours

- (i) Nine Questions will be set in all and students will be required to attempt 5 questions.
- (ii) Question No. 1 will be compulsory and will consist of PART-A &B, comprising 15 and 9 marks respectively. All Qs of PART-A and 3 Qs out of 6 from part-B are to be attempted
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (24 marks each)

four units (24 marks each)	
Content	Learning objectives
UNIT-I	(i-a)
(i-a) Balance of payments: - concept,	Aims at introducing to the students about Balance
definition and component of Balance of	ofPayments and disequilibrium.
Payment; Disequilibrium in Balance of	
Payment; Balance of payment problem	(i-b)
(basic model)	aims at making the students understand about
	adjustment mechanism in balance of payments
( <b>i-b</b> )	
Disequilibrium and Adjustment; Balance	
of Payment adjustment mechanism: Price	
adjustment mechanism.	
UNIT-2	(ii-a)
(ii-a)	Has the objective of giving knowledge about the
The foreign exchange market: The basis of	nature and functions of Forex markets
the foreign exchange market; Exchange	
rate systems	
(ii-b) Institutional aspects of foreign exchange markets; The international character of foreign exchange markets; Exchange risk; Forward exchange; Covered interest arbitrage	(ii-b) Aims at introducing to students about trading and intsruments in Forex markets
UNIT-3 (iii-a) Flexible vs Fixed exchange rates, Theory of employment with Flexible exchange rate; IS-LM model with flexible exchange rate	iii-a Aims at developing understanding in students' mind about effects of fixed and flexible exchange rates

(iii-b) Foreign trade multiplier and its repercussion effect, Foreign trade multiplier and its repercussion effect

iii-b

Has the objective of detailing about the working of foreign trade multiplier, and transmission of trade repercussions

UNIT-4

iv-a

#### (iv-a)

Theory of custom unions: Trade diversion and trade creation effect

Has the objective of describing and explaining the basics of Customs unions

#### (iv-b)

International monetary system: Gold standard (1870-1914); The Inward period; The Bretton Woods system (1944-

period; The Bretton Woods system (1944-1971); The present system of managed flexibility, Special Drawing Rights by IMF

iv-b

Aims at discussing the exchange rates arrangements in historical perspective, and SDRs by IMF

## OVERVIEW OF OUTCOMES GE COURSE- INTERNATIONAL TRADE-II

After the successful completion of the course, the students will be able to Course Objective #

Ecx.611.1 Have knowledge about the basics of Balance of payments and Its adjustment mechanism

Ecx.611.2 Have understanding of organization and working of Forex market and instruments of trading

Ecx.611.3 Have knowledge about Fixed and flexible exchange rate systems and working of foreign trade multiplier

Ecx611.4 Have understanding about Customs unions and history of Exchange rate arrangements

#### GE-COURSE- INTERNATIONAL TRADE-II

CO#	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
Ecx611.1	3	3	1	2	1	2	1	3	2	2	1
Ecx611.2	3	3	2	2	1	1	2	3	2	2	1
Ecx611.3	3	3	1	3	2	1	2	3	2	2	2
Ecx611.4	3	3	1	2	2	1	1	3	2	2	2
Average	3	3	1.25	2.25	1.5	1.25	1.5	3	2	2	1.5

- Bhagwati J. (1988), Protectionism, Cambridge University Press, Mass.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.
- Carbough, R.J. (1999), International Economics, International Thompson Publishing,

- New York
- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study, Guide and Work Book, (5th Edition), Routledge Publishers, London.
- Dunn R.M. adn J.H. Mutt (2000), International Economics, Routledge, London.
- Feenstra, R.C. (1992), "How Costly is Protectionalism?," Journal of Economic Perspectives. 6, 159-178.
- Gallaway, M.C., Blonigen, B.A., and J.E. Flynn, (1999), "Welfare Costs of the US Antidumping and Countervailing Duty Laws", Journal of International Economics, 49, 211-214.
- Goldsten, M. (1998), The Asian Financial crisis: causes cure and systematic implications, Institute of International Economics, Washington D.C.
- Hufbauer G.C. and K.A. Elliott (1994), Measuring the Costs of Protection in the United States, Institute for International Economics.
- Jackson, J. (1989), The World Trading System, Cambridge University Press, Mass.
- Joshi, V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2000, Oxford University Press, New Delhi.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.
- Krugman, P.R. and M. Obstfeld (1994), International Economics: Theory and Policy, Glenview, Foresman.
- Maggi, G. and A. Rodriguez-Clare (1998), "The Value of Trade Agreements in the Presence of Political Pressures," Journal of Political Economy, 106, 574-601.
- Mishkin, S.F. (1998), The Economics of Money, Banking and Financial Markets, (5th Edition), Harper Colins Publishers, New York.
- Miyagiwa, K. and Y. Ohno (1995), "Closing the Technology Gap Under Protection," American Economic Review, 85, 755-770.
- Panagariya, A. (2000), "Preferential Trade Liberalization: the Traditional Theory and new Developments," Journal of Economic Literature, 38, 287-331.
- Panchamukhi V.R. and R. Tandon (1987), Money and Finance in World Economic Order (RIS), Indus Publishing Co. Delhi.
- Panchmukhi, V.R. (1978), Trade Policies of India–A Quantitative Analysis, Concept Publishing Company, New Delhi.
- Patel, S. J. (1995), Indian Economy Towards the 21st Century, University Press Ltd., India.
- Pomfert, R. (1988), Unequal Trade: The Economics of Discriminatory International Trade Policies, Blackwell Publishers, Oxford.
- Satyanarayan, B. (1986), India's Trade with Asia and the Far East Countries, B.R. Publishing Corp., New Delhi.
- Sodirston, Bo. (1991), International Economics, The Macmillan Press Ltd. London.
- Vanderbussche, H. and M. Zanardi (2006), "The Global Chilling Effects of Antidumping Proliferation," CEPR Discussion paper. 5597.