## Proposed Syllabus for M.A. Economics based on CBCS System (Two years/Four semesters)



(To be implemented from the academic session 2025-26)

the state of the s

Department of Economics School of Social Sciences Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.) 495009

# M.A. Economics based on CBCS System (Two years/Four semesters)

Semester	Course Opted	Course Code	Name of the Course	Credit	Hour weak
1	Core-1	ENPATT1	Micro Economic Analysis - I	4	4
	Core - 1 Tutorial	Littini	Tutorial-1 based on Core-1	1	1
	Core -2	ENPATT2	Macro Economic Analysis-I	4	4
	Core -2 Tutorial	BIGIATIE	Tutorial-2 based on Core-2	1	1
	Core-3	ENPATT3	Economics of Growth and Development-I	4	4
	Core -3 Tutorial	Littinis	Tutorial-3 based on Core-3	ı	1
	Open Elective	ENPATO1	Labour Economics	4	4
	Open E. Tutorial	- Division	Tutorial-Open Elective based on Open Elective	1	1
	open E. Tutoriu		Total	20	20
П	Core-4	ENPBTT4	Micro Economic Analysis - II	4	4
	Core -4 Tutorial	D. II D. I.	Tutorial-4 based on Core-4	1	1
	Core -5	ENPBTT5	Macro Economic Analysis-II	4	4
	Core -5 Tutorial		Tutorial-5 based on Core-5	1	1
	Core-6	ENPBTT6	Economics of Growth and Development-II	4	4
	Core -6 Tutorial	Dividition	Tutorial-6 based on Core-6	1	1
	Core-7	ENPBTT7	Indian Economic Policy-I	4	4
	Core -7 Tutorial		Tutorial-7 based on Core-7	1	1
	Core / Tutorium		TOTAL	20	20
Ш	Core-8	ENPCTT8	Indian Economic Policy-II	4	4
	Core -8 Tutorial		Tutorial-8 based on Core-8	1	1
	R.M.	ENPCTT9	Research Methodology	3	3
	R.M. Tutorial		Tutorial-R.M. based on R.M.	1	1
	DSE-1	ENPCTD1 A/B	International Economics-I/ Quantitative Methods/MOOC+Industrial Eco-Project Tutorial DSE 1 based on DSE 1	4	4
	DSE-1 Tutorial		Tutorial-DSE-1 based on DSE-1	I	1
	DSE-2	ENPCTD2 A/B	Econometrics-I/Financial Economics-I	4	4
	DSE-2 Tutorial		Tutorial-DSE-2 based on DSE-2	1	1
			TOTAL	19	19
IV	DSE-3	ENPDTD3 A/B	Data Analysis / Demography/MOOC	4	4
	DSE-3 Tutorial		Tutorial-DSE-3 based on DSE-3	1	1
	DSE-4	ENPDTD4 A/B	International Economics-II/ Public Finance	4	4
	DSE-4 Tutorial		Tutorial-DSE-4 based on DSE-4	1	1
	DSE-5	ENPDTD5 A/B	Econometrics-II/ Financial Economics-II	4	4
	DSE-5 Tutorial		Tutorial-DSE-5 based on DSE-5	1	1
	Dissertation	ENPDDH1	Dissertation	4	4
			Presentation	2	2
			Total	21	
			Total Credits (Semester I+II+III+IV)	80	

W ST M/2

## DEPARTMENT OF ECONOMICS GURU GHASIDAS VISHWAVIDYALAYA (CG)

M.A. Economics (CBCS Course)

## SEMESTER-I

Paper	Semester-I	Credits
	Micro Economic Analysis - I	4L + 1T = 5
Core-2	Macro Economic Analysis-I	4L + 1T = 5
Core-3	Economics of Growth and Development-I	4L + 1T = 5
	Labour Economics	4L + 1T = 5

6 57 82 By

## <u>Core-1</u> Micro Economic Analysis-I

## Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding Deductive and Inductive Methods; Positive and Normative Economics; Economic Models; income and substitution effects, Revealed preference theory; Elasticity; Cobb-Douglas, Isoquants—Least cost combination of inputs; Euler's theorem; Cost and Revenue; Price and Output Determination in the perfect and imperfect market. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them.

#### Unit 1

Introduction and Basic Concepts: Deductive and Inductive Methods of Analysis; Positive and Normative Economics; Economic Models; Characteristics of Equilibrium and Disequilibrium Systems

(08 Classes)

#### Unit 2

Demand Analysis: Indifference curve (income and substitution effects, Slutsky theorem, compensated demand curve); Revealed preference theory; Elasticity

(12 Classes)

#### Unit 3

Theory of Production: Production function — short period and long period; Cobb-Douglas, Isoquants — Least cost combination of inputs; Euler's theorem

(10 Classes)

#### Unit 4

Cost and Revenue: Interrelationship between TC, AC, And MC: Short run and long run, TR, AR, MR: Sort run and long run;

(10 Classes)

#### Unit 5

Price and Output Determination: Marginal analysis as an approach to price and output determination: perfect competition — short run and long run equilibrium; Monopoly — short run and long run equilibrium, price discrimination, Monopolistic competition — general and Chamberlin approaches to equilibrium, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition;

(20 Classes)

#### BASIC READING LIST

 Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.

by of ET My

- Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London.
- 3. Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York
- Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- 5. Stigler, G. (1996), Theory of Price, (4th Edition), Prentice Hall of India, New Delhi.
- 6. Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.
- Hirsh Leifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- Baumol, W.J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Green, H.A.G. (1971), Consumer Theory, Penguin, Harmondsworth.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Da Costa, G.C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- 12. Archibald, G.C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- Da Costa, G.C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.

k at on.

## <u>Core- 2</u> Macro Economic Analysis-I

Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding National income and accounting; income – consumption relationship; Investment Function and investment behavior; Supply and Demand for money; The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them.

#### Unit 1

National Income and Accounts Circular Flow of Income in two-, three- and four-sector economy;

(10 Classes)

#### Unit 2

Consumption Function Keynes' psychological law of consumption, Income-consumption relationship — absolute income, relative income, life cycle and permanent income hypotheses

(12 Classes)

#### Unit 3

Investment Function, Marginal efficiency of investment and level of investment; Marginal efficiency of capital and investment; The accelerator and investment behavior — impact of inflation;

(13 Classes)

#### Unit 4

Supply of Money, A behavioral model of money supply determination, a demand determined money supply process; RBI approach to money supply; High powered money and money multiplier; budget deficits and money supply; control of money supply.

(15 Classes)

#### Unit 5

Demand for Money, Quantity theory approach, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference approach,

(10 Classes)

#### BASIC READING LIST

1. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.

 Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.

- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- 4. Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.

5. Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W. Norton, New York.

 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

(of 5)

- Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York
- 9. Scarfe, B.L. (1977), Cycles, Growth and Inflation, McGraw Hill, New York.
- 10. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- 11. Surrey, M.J.C. (Ed.) (1976), Macroeconomic Themes, Oxford University Press, Oxford.
- Edey, M. and A.T. Peacock (1967), National Income and Social Accounts, Hutchinson University Library, London.
- Powelson, J.P. (1960), National Income and Flow of Funds Analysis, McGraw Hill, New York.
- Rao, V.K.R.V. (1983), India's National Income: 1950 to 1980, Sage Publications, New Delhi.
- Ruggles, R. and N. Ruggles (1956), National Income Accounts and Income Analysis, McGraw Hill, New York.
- 16. United Nations (1974), Year Book of National Account Statistics.

= 57 Sz By

# Core- 3 Economics of Growth and Development-I

#### Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding Economic growth and development: like Harrod-Domar, Solow, Mrs. Joan Robinson's growth model; Technological, social and institutional development and underdeveloped economy; classical theory and Approaches to development etc. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them. The teachers will be taking some remedial classes too for the good cause of the students.

#### Unit 1

Economic growth and development; Factors affecting economic growth: capital, labour and technology; Growth models; Harrod and Domar, instability of equilibrium; Neo-classical growth models; Solow, Mrs. Joan Robinson's growth model.

(10 Classes)

#### Unit 2

Technological progress; embodied and disembodied technical progress; Hicks, Harrod; learning by doing, production function approach to the economic growth.

(10 Classes)

#### Unit 3

Social and Institutional Aspects of Development and underdevelopment; Perpetuation of underdevelopment; Measuring development and development gap, Human resource development; Population problem and growth pattern of population.

(15 Classes)

#### Unit 4

Theories of Development Classical theory of development; contributions of Ricardo; Karl Marx and development of capitalistic economy; theory of social change, surplus value and profit; Immutable laws of capitalist development; Crisis in capitalism; Schumpeter and capitalistic development.

(15 Classes)

#### Unit 5

Approaches to Development Partial theories of growth and development; vicious circle of poverty, unlimited supply of labour, big push, balanced growth, unbalanced growth, critical minimum effort thesis, low-income equilibrium trap; Dualism; technical, behavioral and social

1 32 ET

(10 Classes)

#### BASIC READING LIST

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Chenery, H.B. et. al. (Eds.) (1974), Redistribution with Growth, Oxford University 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.
- 9. Gimmell, N. (1987), Surveys in Development Economics, Blackwell, Oxford.
- 10. Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- 11. Hogendorn, J. (1996), Economic Development, Addison, Wesley, New York.
- Kahkonon, S. and M. Olson (2000), A New Institutional Approach to Economic Development, Vistaar.
- Kindleberger, C. P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M. (1995), Leading Issues in Economic Development, (6th Edition), Oxford University Press, New Delhi.
- 15. Myint, Hla (1965), The Economics of Underdeveloped Countries, Preager, New York.
- Myint, H. (1971), Economic Theory and Underdeveloped Countries, Oxford University Press, New York.

Let & By.

## Open Elective (OE)

#### Labour Economics

Course Objectives: This course will introduce the students to some of the major ideas and concepts in the areas of Employment and Wage Determination, Supply and Demand of Labour, Wages and Social Security. It also gives an overview of health and education in India. This course exposes students to theoretical and empirical issues related to the labor market with special reference to India.

Course Learning Outcomes: They will be able to apply economic theory to understand the demand for health care, market failure in labour market economic evaluation of labour welfare programmes and the role of labour policy in the Indian Economy. This study will generate employment opportunities for students in labor welfare, labor policy and wage rate determination.

- Unit 1- Concept of Labour: Labour Economics- Definition, Nature, Scope & Importance, Labour- Meaning, Its characteristics, types and classification, significance role of labour in economic development of a developing country like India, characteristics and growth of labour market in India, Demand and Supply of Labour, Mobility and Productivity of Labour.
- Unit 2- Employment and Wage Determination: Employment and Development relationship, poverty and unemployment; types, concepts and measurement, Methods of Recruitment, Wage Determination- Classical, Neo-classical and Bargaining theories; Concepts of minimum wage, Living Wage and Fair Wage.
- Unit 3- Social Security and Labour Welfare: Social Security in India— Need of Social Security, workmen compensation Act, Maternity Benefit act and Employees state Insurance Scheme, Different Schemes of Social Security in India.
- Unit 4- Industrial Disputes: Meaning, types, Causes Consequence Prevention and Settlement, Industrial Disputes in India—Main Causes and Remedies, Industrial Dispute Act. 1947, Labour Legislation and Trade Unions, child and women labour in India, measures to prevents child labour.
- Unit 5- Employment policies in India: Employment policies in Five Year Plans and its evaluation, Profit Sharing, Labour and Informal Sector in India, Covid-19 Pandemic and employment, Rural and Agricultural Labour in India.

#### Suggested Readings:

- Bhagoliwal T.N. (2002), Economics of Labour and Industrial Relations: Sahitya Bhavan Agra.
- 2. Dutt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications: New Delhi.
- 3. Gupta P.K. (2012) Labour Economics, New Delhi Virnda Publication (p) Ltd.

E ST

Sz oy

- Hajela P.D. Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publishers: New Delhi.
- 5. Lester, R.A. (1964) Economics of Labour (2nd Ed.), Macmillan, New York.
- Papola, Ghosh and A.N.Sharma (1993) Labour Employment and Industrial Relations in India B.R. Publishing House: New Delhi.
- R.R. Singh (1971): Labour Economics, Agra, Sri Ram Mehra.
- 8. V.V. Giri (1972): Labour Problem in India Industry, Asia Publishing House: New Delhi.

E- 67 82 My

## SEMESTER-II

Paper	Semester-II	Credits
Core-4	Micro Economic Analysis – II	4L + 1T = 5
Core-5	Macro Economic Analysis-II	4L + 1T = 5
Core-6	Economics of Growth and Development-II	4L + 1T = 5
Core-7	Indian Economic Policy-I	4L + 1T = 5

by State of By

#### Core-4

#### Micro Economic Analysis-II

## Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding Oligopoly, collusive and non-collusive; sales revenue maximization model; Welfare Economics; General Equilibrium Partial and general equilibrium; Economics of Uncertainty etc. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them. The teachers will be taking some remedial classes too for the good cause of the students.

#### Unit 1

Oligopoly; Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution) and collusive (Cartels and mergers, price leadership monopsony and bilateral monopoly.

(13 Classes)

#### Unit 2

Alternative Theories of the Firm Critical evaluation of marginal analysis; Baumol's sales revenue maximization model; Williamson's model of managerial discretion; Marris model of managerial enterprise; Game theoretic models

(17 Classes)

#### Unit 3

Welfare Economics Pigovian welfare economics; Pareto optimal conditions; Value judgement; Kaldor and Hicks Model, Scitovosky Model; Social welfare function;

(15 Classes)

#### Unit 4

General Equilibrium Partial and general equilibrium, Walrasian excess demand to general equilibrium.

(8 Classes)

#### Unit 5

Economics of Uncertainty Individual behaviour towards risk, expected utility (N-M Theory) (7 Classes)

#### BASIC READING LIST

- 1. Hirsh Leifer, J. and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
- Archibald, G.C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- 3. Da Costa, G.C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi
- 4. Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.
- Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.
- 6. Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, London.

2 61

Ste Ty



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

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

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

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

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

 Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.

 Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London.

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

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

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

## Core-5 Macro Economic Analysis-II

## Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding. The IS-LM model, post-Keynesian approaches to demand for money; Mundell-Fleming model; Theory of Inflation Classical, Business Cycles etc. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them. The teachers will be taking some remedial classes too for the good cause of the students.

#### Unit 1

The IS-LM model; Extension of IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies.

(15 Classes)

#### Unit 2

Post-Keynesian approaches to demand for money; Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin.

(15 Classes)

#### Unit 3

Macroeconomics in an Open Economy Mundell-Fleming model, Monetary approach to balance of payments.

(10 Classes)

#### Unit 4

Theory of Inflation Classical, Keynesian and Monetarist approaches to inflation; Philips curve analysis; Short run and long run Philips curve.

(12 Classes)

## Unit 5

Business Cycles, Theories of Schumpeter, Samuelson and Hicks, Control of business cycles; relative efficacy of monetary and fiscal policies

(08 Classes)

## BASIC READING LIST

- 1. Rao, V.K.R.V. (1983), India's National Income: 1950 to 1980, Sage Publications, New
- 2. Ruggles, R. and N. Ruggles (1956), National Income Accounts and Income Analysis, McGraw Hill, New York.
- 3. United Nations (1974), Year Book of National Account Statistics.
- 4. Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour. Harvard University Press, Harvard.
- 5. Friedman, M. (1957), The Theory of Consumption Function, Princeton University Press,
- 6. Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.

- Mueller, M.G. (1966), Readings in Macroeconomics, Holt Rinehart and Winston, New York
- Gordon, R. and S.G. Harris (1998), Macroeconomics, Addison Wesley.
- Culbertson, J.M. (1968). Macroeconomic Theory and Stabilization Policy, McGraw Hill, Kogenkosh, Tokyo.
- Chakravarty, S.C. (1985), Report of the Committee to Review the Working of the Monetary System, Reserve Bank of India, Bombay.
- 11. Gupta, S.B. (1995), Monetary Planning in India, Oxford University Press, New Delhi.
- Gurley, J. and E.S. Shaw (1960), Money in a Theory of Finance, Brookings Institution, Washington.
- Mckinen, G.E. (1978), Money, The Price Level and Interest Rates, Prentice Hall of India, New Delhi.
- 14. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- 17. Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York.

e St E Ry

# Core-6 Economics of Growth and Development-II

#### Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding Development Role of agriculture in economic development, International trade as engine of growth, Development Role of monetary and fiscal policies; Cost-benefit analysis; Development Need for planning, etc. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them. The teachers will be taking some remedial classes too for the good cause of the students.

#### Ilmit 1

Sectoral Aspects of Development Role of agriculture in economic development; Efficiency and productivity in agriculture, new technology and sustainable agriculture; Globalization and agricultural growth.

(15 Classes)

#### Unit 2

Trade and Economic Development International trade as engine of growth; Static and dynamic gains from trade; Prebisch, Singer and Myrdal thesis vs. free trade; Export-led growth; Dual gap analysis; Balance of payments; Tariffs and effective protection; post-GATT international economic order; WTO and developing countries. (15 Classes)

#### Unit 3

Macroeconomic Policies and Development Role of monetary and fiscal policies in developing countries, Borrowings; domestic and external; Burden of borrowing; IMF and World Bank policies in developing countries

(15 Classes)

#### Unit 4

Allocation of Resources Need for investment criteria in developing countries; present vs., future, Alternative investment criteria; Cost-benefit analysis, Shadow prices, Project evaluation

(08 Classes)

#### Unit 5

Planning and Development Need for planning; democratic, decentralized and indicative planning, Review of Indian Plan models and planning, NITI Aayog (07 Classes)

## BASIC READING LIST

- 1. Taylor, L. (1979), Macro Models for Developing Countries, McGraw Hill, New York.
- Theberge, J.D. et. al. (1968), Economics of Trade and Development, John Wiley, New York.

E1

3

Ry.

- Dasgupta, P. (1993). An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Hirsch, A.O. (1958), The Strategy of Economic Development, Yale University Press, New York.
- Lewis, W.A. (1955), The Theory of Economic Growth, George Allen and Unwin, London.
- Mehrotra, S. and J. Richard (1998), Development with a Human Face, Oxford University Press, New Delhi.
- Meier, G.M. and D. Seers (Eds.) (1987), Pioneers in Development, Oxford University Press, New York.
- 8. Myrdal, G. (1957), Economic Theory and Underdeveloped Regions, Duckworth, London.
- Schumpeter, J.A. (1949), The Theory of Economic Development, Harvard University Press, Cambridge, Mass.
- Todaro, M.P. (1971), Development Planning: Models and Methods, Oxford University Press, Oxford.
- 11. United Nations (1994), Human Development Report, United Nations, New York.
- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Chenery, H.B. et. al. (Eds.) (1974), Redistribution with Growth, Oxford University Press, Oxford.

by Star On

## Core-7 Indian Economic Policy-I

## Course Objectives:

The students will have learning outcome in terms of having good knowledge regarding fasters, sustainable and inclusive Growth; indicators of development, Human Development Index (HDI), Gender Empowerment Index, Objectives and strategy of planning in India with reference to Five Year Plan, Broad Demographic Features Energy Policy in India the Agricultural Sector. The students will disseminate the learning outcomes for preparatory stage in CGPSC, UPSC and various competitive examinations; disseminate to different students later on teaching and guiding them. The teachers will be taking some remedial classes too for the good cause of the students.

#### Unit 1

Fasters, Sustainable and Inclusive Growth; Indicators of development; PQLI, Human Development Index (HDI), gender development indices, Gender Empowerment Index

Unit 2

Objectives and strategy of planning in India with reference to Five Year Plan; Developing grassroot organizations for development; Panchayats, NGOs and pressure groups.

(15 Classes) Unit 3

Broad Demographic Features, Problem of Unemployment, Poverty and Inequality Rural-urban migration;

(10 Classes) Unit 4

Energy Policy in India; Social infrastructure; education and health; Environment; Regional imbalances (08 Classes)

#### Unit 5

The Agricultural Sector - land reforms in India; Technological change in agriculture; pricing of agricultural inputs and output; Agricultural finance policy; Agricultural Marketing; Food security. (12 Classes)

#### READING LIST:

- 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
- 2. Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
- 3. Bawa, R.S. and P.S. Raikhy (Ed.) (1997), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.

e & gr

- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Book well, Delhi.
- Chakravarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.
- Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.
- Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
- 8. Government of India, Economic Survey, (Annual), Ministry of Finance, New Delhi.
- 9. Jain, A.K. (1986), Economic Planning in India, Ashish Publishing House, New Delhi.
- 10. 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.
- Joshi, V. and I.M.D. Little (1999), India: Macro Economics and Political Economy, 1964-1991, Oxford University Press, New Delhi.

2 ST

# DEPARTMENT OF ECONOMICS GURU GHASIDAS VISHWAVIDYALAYA (CG)

M.A. Economics (CBCS Course)

## SEMESTER-III

Semester-III	Credits
The state of the s	4L + 1T = 5
	3L + 1T = 4
Research Methodology	
International Economics-I/ Quantitative Methods	4L + 1T = 5
OR	8 88 92
MOOC Paper - International Economics	4 Credit
Industrial Economics-Project Work	1 Credit
Econometrics-I/Financial Economics-I	4L + 1T = 5
	MOOC Paper - International Economics Industrial Economics- Project Work

ke 57 gg

## <u>Core-8</u> Indian Economic Policy-II

Course Objectives: The course Indian Economic Policy-II aims to provide students with a comprehensive understanding of the Indian economy in the post-independence and post-reform periods. It focuses on analyzing key policy developments such as the New Industrial Policy of 1991, the composition and challenges of the MSME sector, and fiscal federalism in India. The course also covers financial sector reforms, monetary policy, and the role of institutions like the RBI and SEBI.

Learning Outcomes: After completing this course, students will be able to critically analyze the major economic policies that have shaped the Indian economy since independence, with a special focus on the post-1991 liberalization period. They will gain a clear understanding of fiscal federalism, financial sector reforms, and monetary policy mechanisms in India. Students will also develop the ability to assess external trade policies, exchange rate management, and the role of foreign capital and multinational corporations.

#### Unit 1

Major features of Indian economy at the eve of Independence; New Industrial Policy 1991-Goals, Objectives, Main features; MSME; Composition, Importance, Major Problems; Privatizations and disinvestment debate; Approaches for Employment Generation.

#### Unit 2

Public Finances Fiscal federalism; Centre-state financial relations; Finances of central government; Finances state governments; Parallel economy; Fiscal sector reforms in India.

#### Unit 3

Financial sector reforms; Interest rate policy; Review of monetary policy of RBI; Working of SEBI in India.

#### Unit 4

External Sector Structure and direction of foreign trade; Issues in export-import policy and FEMA; Exchange rate policy; Foreign capital and MNCs in India

#### Unit 5

Recent initiatives for development- NRLM, Make in India, Aatmnirbhar Bharat, Start-up India scheme, PM Kaushal Vikash Yojna.

#### References

- 1. Ahluwalia, I.J. and I.M.D. Little (Eds.): India's Economic Reforms and Development (Essays in honor of Manmohan Singh).
- 2. Kapila, Uma: Indian Economy: Performance and Policies
- 3. Datt and Sundaram: Indian Economy (latest edition)
- 4. Mishra and Puri: Indian Economy (latest edition)
- 5. Singh, Ramesh: Indian Economy (latest edition)
- 6. Chakravarty, S.: Development Planning: The Indian Experience.
- Chelliah, Raja J. and R. Sudarshan: Income, Poverty and Beyond: Human Development in India.
- Dantwala, M.L.: Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.

22 ET ON! 22

## R. M. Research Methodology

Course Objective:

The course begins with the understanding & Eamp; foundations of Research, and covers the issues concerning the Research Process, Formulation of the Research Problem, Literature Survey, Working Hypothesis and concepts & Eamp; importance of Research Design and Values in Research.

**Course Learning Outcomes** 

The course imparts skills to undertake data-based research. The student enrolling in this course would develop competency in executing sample surveys and would have reasonable exposure to conduct a Research Study.

Unit 1

Foundations of Research: Meaning of Research, objectives of research, Types of Research, Research Approaches, Significance of Research, and Research Methods versus Methodology.

Unit 2

Research Process, Formulating the Research Problem, Literature Survey, Development of working Hypothesis, Preparing the Research Design, Determining Sample Design, Execution of the Project, Data Analysis and Tools, Generalization and Interpretation, Preparation of the Report, Research Report Writing.

Unit 3

Research Design: Meaning of Research Design, Need for Research Design, Different Research Designs- Exploratory Research Design, Descriptive Research Design, Concept of population, sample, sampling frame, Parameter, Statistic.

Unit 4

Hypothesis: Definition, null hypothesis and alternative hypothesis, hypothesis Testing- Type I and Type II error, Sampling distribution, standard error-utility of standard error, sampling error.

Unit 5

Values in Research – Publication Ethics, lessons from the lives and teachings of great leaders (Mahatma Gandhi- Father of Nation), role of family, society and educational institutions in inculcating values.

Suggested Readings

 Goon, A. M, Gupta, M. K, and Dasgupta, B. Fundamentals of Statistics (Volumes One and Two), The World Press Private Ltd.

23 Sy 39

 C. R. Kothari: Research Methodology: Methods and Techniques (second revised edition), New Age India (P) Ltd Publishers.

3. Alpha C. Chiang and Kavin Wain Wright: Fundamental Methods of Mathematical Economics, McGraw Hill, 2005. [For stability analysis]

4. GOI, Note on Sample Design and Estimation Procedure of NSS 68th Round, National Sample Survey Office, Ministry of Statistics and Programme Implementation.

 Cooper, D.R., Schindler, P.S. and Sun, J., 2006. Business research methods (Vol. 9). New York: McGraw-Hill Irwin.

 Creswell, J.W. and Creswell, J.D., 2017. Research design: Qualitative, quantitative, and mixed methods approach, Sage publications.

& St ET Dy

#### DSE-1

## International Economics-I

#### **Course Objectives**

This course is an analytical course in international trade and international finance. Students are introduced to the theories with which to understand international trade patterns, examine trade policies, and analyze the issues of international economic interdependence between countries.

#### Unit1

Distinguishing features of Interregional and International trade; Ricardo's theory of comparative differences in costs and its application in underdeveloped countries (15 Classes)

#### Unit2

Mills' theory of Reciprocal Demand; Explanation of Reciprocal Demand with the help of Offer Curves (10 Classes)

#### Unit3

Haberler's Theory of Opportunity Costs; International trade under constant, Increasing and decreasing opportunity costs; (15 Classes)

#### Unit4

The Modem Theory of Factor Endowments; its explanation underprice criterion and physical criterion; Theory's relevance today; its superiority over the classical theory; Leontief Paradox (10 Classes)

#### Unit 5

Tariffs meaning and types; Effects of tariff under partial Equilibrium; Optimum tariff and welfare; Dumping: Types, Objectives and effects of dumping; Anti-dumping measures.

(10 Classes)

#### READING LIST:

- Bhagwati, J. (Ed.): International Trade, Selected Readings.
- 2. Brahmananda, P. R.: The IMF Loan and India's Economic Future.
- Carbough, R.J.: International Economics.
- Chacholiades, M.: International Trade: Theory and Policy.
- 5. Corden, W.M.: Recent Developments in the Theory of International Trade.
- 6. Crockett, A.: International Money: Issues and Analysis.
- 7. Dana, M.S.: International Economics: Study, Guide and Work Book.
- 8. Dunn, R.M. and J.H. Mutti: International Economics.
- 9. Grable, J.O.: International Financial Markets.
- 10. Greenway, D.: International Trade Policy.
- 11. Heller, H. Robert: International Monetary Economics.
- 12. Jackson, J.: The World Trading System.

- ET Gray

13. Kenen, P.B.: The International Economy.

14. Kindleberger, C.P.: International Economics.

- 15. King, P.G.: International Economics and International Economic Policy: A Reader.
- 16. Krugman, P.R. and M. Obstfeld: International Economics: Theory and Policy.

17. Linder, S.B.: An Essay on Trade and Transformation.

18. Manmohan Singh: India's Export Trends and the Prospects for Self-sustained Growth.

k gr 37 sy.

#### DSE-1

#### **Quantitative Methods**

#### Course Outcomes:

Provides students with quantitative skills that are required to make business decisions. These skills involve using forecasting and mathematical techniques. Formulation and application of mathematical models in business decision making scenarios. Outline quantitative models to decision making and problem analysis, and their interpretations in transportation problems and game theory.

#### Unit 1

Rules of differentiation; Interpretation of revenue, cost, demand, supply functions; Elasticities; (10 Classes)

#### Unit 2

Rules of partial differentiation and its application in Economics: Problems of maxima and minima, Simple problems in market equilibrium; Concept of integration; Simple rules of integration; Application to consumer's surplus and producer's surplus;

(15 Classes)

#### Unit 3

Concept of matrix — their types, simple operations on matrices, matrix inversion and rank of a matrix; Determinants and their basic properties: Solution of simultaneous equations through Cramer's rule;

(10 Classes)

#### Unit 4

Linear programming: Basic concept; Formulation of a linear programming problem — Its structure and variables; Nature of feasible and optimal solution; Solution of linear programming through graphical method; Concept of duality

(15 Classes)

#### Unit 5

Game Theory: Strategies — simple and mixed (2X2); Saddle point solution; Value of a game;
(10 Classes)

#### BASIC READING LIST

- Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Gupta, S.C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.
- Handry, A.T. (1999), Operations Research, Prentice Hall of India, New Delhi.
- Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
- Taha, H.A. (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
- 7. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

& & By.

- Baumol, W.J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.
- Monga, G.S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
- Vygodsky, G.S. (1971). Mathematical Handbook (Higher Mathematics). Mir Publishers. Moscow.
- Mathur, P.N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.
- 12. Hadley, G. (1962), Linear Programming, Addison Wesley Publishing Co., Massachusetts.
- Kothari, C.R. (1992). An Introduction to Operations Research, Vikas Publishing House, New Delhi.
- Mustafi, C.K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.
- 15. Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winston, New York.
- Croxton, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi.
- 17. Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.

and Sy

## DSE-1 (MOOC Course)

## **Paper: International Economics**

Language for course content:	English
Duration	12 weeks
Category	Economics
Credit Points	4
Level	Postgraduate
Start Date	. 15 Jul 2025
End Date	15 Nov 2025
Enrollment Ends	15 Sep 2025
Exam Date	

## **Course Layout**

	INTERNATIONAL ECONOMICS
	Module 1: Introduction to International Trade
Week-1	Video Lecture: The Basic Concept of International Economics
Week-1	Video Lecture: Distinguishing Features of International Trade
	Video Lecture: Need for a Separate Theory of International Trade
	Module 2: Basic Theory of International Trade
	Video Lecture: The Theory of International Trade
Week-2	Video Lecture: The Theory of Comparative Advantage
	Video Lecture: The Opportunity Costs Theory
	Video Lecture: Dynamic Factors and International Trade

e & Sh on

	Module 3: Advanced Theories of International Trade I
Week-3	Video Lecture: Heckscher-Ohlin Theory of Trade and Leontief Paradox
	Video Lecture: Theorem of Factor Price Equalization
	Video Lecture: The Rybczynski Theorem and The Stopper Samuelson Theory
	Module 4: Advanced Theories of International Trade
Week-4	Video Lecture: Meaning and Significance of Intra-Industry
	Video Lecture: Vent-For-Surplus, Availability Approach;
	Video Lecture: Product-Cycle Model; Technological Gap Model
	Module 5: Gains from Trade
Week-5	Video Lecture: Concept of Gains from Trade,
	Video Lecture: Offer Curve: Derivation of Offer curve, Equilibrium terms of trade, Elasticity of Offer Curve;
	Video Lecture: Distribution of Gains from Trade in Terms of Offer Curves; Trade as an Engine of Economic Growth
	Module 6: Terms of Trade
	Video Lecture: Meaning and Components of Terms of Trade.
Week-6	Video Lecture: Gains from Trade and Factors Affecting Terms of Trade
	Video Lecture: International Trade and Domestic Prices; Relation of Foreign Trade to National Income
	Module 7: Trade, Growth and Immiserisation
Week-7	Video Lecture: Effects of Growth on Trade
	Video Lecture: Immiserising Growth: Explanation, Necessary Conditions for Immiserising Growth
	Video Lecture: Prebisch-Singer Thesis: Explanation, Criticisms and Distributive Effects
Week-8	Module 8: Tariff

ke gr & og.

	Video Lecture: Types and classification of Tariff:
	Video Lecture: Effects of Tariff under Partial Equilibrium; Effects of Tariff under General Equilibrium:
	Video Lecture: General Equilibrium analysis of Tariff in a Small Country and Large Country
	Video Lecture: Country;
	Video Lecture: Optimum Tariff: Optimum Tariff with Retaliation, The Optimum Tariff Formula
	Module 9: No-Tariff
	Video Lecture: Objectives of Import Quotas;
Week-9	Video Lecture: Dumping-Multilateralism and WTO;
	Video Lecture: The Role of The WTO in Anti-Dumping;
	Video Lecture: Multilateralism and WTO
	Module 10: Theory of Custom Union and SAARC
Week-10	Video Lecture: European Economic Community: BREXIT
	Video Lecture: South Asian Association for Regional Cooperation: Objectives of SAARC
	Module 11: Balance of Payments and International Monetary System
7	Video Lecture: Balance of Payment: Meaning and Definition, Difference between BOP and BOT,
	Video Lecture: Equilibrium and Disequilibrium in BOP:
Week-11	Video Lecture: Process of Adjustment: Fixed Exchange Rate, Flexible Exchange Rate
	Video Lecture: Evolution of International Monetary System, Special Drawing Rights
	Video Lecture: International Capital Movements

k & Sz By

Week-12	Module 12: Foreign Trade Multiplier and determination of exchange rat
	Video Lecture: The Concept of Foreign Trade Multiplier and Contractionary Effect of Increase in Imports on National Incomes;
	Video Lecture: Foreign Trade Repercussion
	Video Lecture: Effect of Increase in Investment and Export; Deficiencies of Foreign Trade Multiplier

## Books and references

- 1. Salvatore, D. International economics. Wiley.
- 2. Jhingan, M. L., International economics. Vrinda Publishing Pvt. Ltd.
- 3. Mannur, H. G., International economics. Vikash Publishing House Pvt. Ltd.
- 4. Mithani, D. M., International economics. Himalaya Publishing House.
- 5. Rana, K. C., & Verma, N. International economics. Vishal Publishing Co.
- 6. Sodersten, B., & Reed, G. International economics. Macmillan.
- Krugman, P., Obstfeld, M., & Melitz, M. J. International economics: Theory and policy (10th ed.). Pearson.
- 8. Bhagwati, J. N., & Srinivasan, T. N. International trade: Theory and policy. MIT Press.

#### Course certificate

**Exam Registration URL**: Announcements will be made when the registration form is open for registrations.

The online registration form has to be filled, and the certification exam fee needs to be paid.

#### Criteria to get a Certificate

30 Marks will be allocated for Internal Assessment (Final Quiz- Mandatory) which will be available at the end of the course and 70 Marks will be allocated for end term proctored examination.

A minimum of 40% passing marks (i.e. at-least 12 marks in Internal Assessment (Final Quiz-Mandatory) & 28 Marks in external proctored examination) will be required for being eligible for SWAYAM Certificate.

k gr

## DSE-1 Industrial Economics— Project Work

Course Objectives: - The objective of this course is to acquaint the student with the actual operating process of small business so that he/she can start his/her own business using the experience in real life if needed.

Course Outcomes: After completion this course students will able to understand how really small business work, which type of problems faced by SSIs and what is the procedure to establish a new SSI, etc.

#### **Course Contents:**

Students have to select any one small business with the help of their class teacher and after studying that business deeply prepare a comprehensive report on the basis of your real experience under the guidance of the class teacher. Students will be required to submit typed copy of hardbound dissertation/report in the department.

& By.

#### DSE-2

#### Econometrics-I

Course Objective: Econometrics is a tool to judge the role of economic variables in the economic development.

#### Unit-1

Indian Knowledge System and Econometrics.

#### Unit- 2

Meaning and Methodology of Econometrics-Nature and Scope of Econometrics. The Nature of Regression Analysis and Basics of Two-Variable Regression Analysis. Estimation and Hypothesis Testing.

#### Unit-3

Multiple Regression Model, Estimation and Inference.

#### Unit-4

Nature, Consequences, Detection and Remedial Measures of Multi Collinearity, Heteroscedasticity and Autocorrelation.

#### Unit-5

Regression on Dummy Variable, Dynamic Econometrics Models: Autoregressive and Distributed Lag Models-Koyek Approach.

#### BASIC READING LIST

- Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge, Mass.
- Baltagi, B.H. (1998), Econometrics, Springer, New York.
- 3. Dongherty, C. (1992), Introduction to Econometrics, Oxford University Press, New York.
- Goldberger, A.S. (1998), Introductory Econometrics, Harvard University Press, Cambridge, Mass.
- 5. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Hill R. C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
- 7. Kennedy. P. (1998), A Guide to Econometrics (4th Edition), MIT Press, New York.
- Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.), The Macmillan Press Ltd., London.
- Krishna, K.L. (Ed.) (1997), Econometric Applications in India, Oxford University Press, New Delhi.
- Maddala, G.S. (Ed.) (1993), Econometrics Methods and Application (2 Vols.), Aldershot U.K.

by Se

## DSE-2

#### Financial Economics-I

**Course Objectives** 

The main objective of this course is to introduce students to the basic theories, and concepts in Finance. This course bridges economics and finance and lays the foundation for the MA Economics program. The course starts from the economic foundations and elaborates on financial economics. Students will get an over view of the functioning of the financial markets, importance of risk/ uncertainty, applications of time value of money, market efficiency and decisions.

#### Course Outcomes

1. Knowledge

Explain the theoretical underpinnings of financial economics. Evaluate the link between the financial system and the real economy. Assess the importance of risk in financial economics.

Importantly, hands-on data analysis modules with applications relevant to Financial Economics using tools like R/STATA are to be a part of the curriculum, which would equip students to analyses market trends and work on big data.

3. Application

After learning these modules one can able to solve the market and industry related issues in security market investment.

**Course Outline** 

UNIT-I: Background of Financial Markets

Understanding Investments-Introduction to Financial Markets: Structure, Organization & functions - classification of financial markets- Money Market and Capital Market and its Instruments- Investment Alternatives-Indirect Investing- Securities Markets and Market Indices-How Securities are Traded.

**UNIT-II: Choice Under Uncertainty** 

Utility theory preference and choice- the opportunity set- indifference curves- utility functionsexpected utility theorem; certainty equivalence, measures of risk-absolute and relative risk aversions; stochastic dominance-first order, second order and third order; measures of investment risk-variance of return, semi-variance of return.

UNIT-III: Portfolio and Capital Market Theory

The Returns and Risks from Investing- Return and its measure, Risk and its measure; Portfolio Theory- Dealing with Uncertainty, Modern Portfolio Theory; Portfolio Selection and Asset Allocation- Portfolio using Markowitz Principles, Selecting Optimal Asset Classes, Asset Allocation and Individual Investor, Impact of Diversification on Risk; Capital Market Theory and Asset Pricing Models- Capital market theory and Arbitrage Pricing Theory.

**UNIT-IV: Securities and Equity Price** 

The supply of securities- corporate securities- Introduction to Mutual Funds- Role of Mutual Funds in Financial Markets- Advantages and Disadvantages of Mutual Funds-Types of Mutual Funds Mutual Fund-AMFI.

ET The By

## UNIT-V: Common Stocks: Analysis, Valuation, and Management

Common Stock Valuation- Discounted Cash Flow Models, Dividend Discount Model, Other Discounted Cash Flow Approaches, Earnings Multiplier Approach and Relative Valuation Metrics; Common Stocks: Analysis and Strategy- Impact of the Overall Market on Stocks. Building Stock Portfolios, Passive Strategy and Active Strategy; Market Efficiency- Concept of an Efficient Market, Test for Market Efficiency, Market Anomalies and Behavioural Finance.

## Reference Books

- 1) Bailey, R. E. (2005). The Economics of Financial Markets. Cambridge University Press.
- 2) Chandra, P. (2012). Investment Analysis and Portfolio Management. Tata McGraw-Hill Education Private Limited.
- 3) Elton, E.J and M.J. Gruber, (1991). Modern Portfolio Theory & Investment Analysis. John Wiley & Sons Private Limited.
- 4) Houthakker, H.S. and P.J. Williamson. (1996). Economics of Financial Markets. Oxford University Press.
- 5) Jones, Charles P.(2013). Investments: Analysis and Management. Wiley Publication, 12th
- 6) LeRoy, S. F., & Werner, J. (2014). Principles of Financial Economics. Cambridge University Press.
- 7) Mele, A. (2022). Financial Economics. MIT Press
- 8) Reilly, Frank K, Brown, Keith C and Leeds, Sanford J. (2018). Investment Analysis & Portfolio Management. Cengage Publishing House, USA.
- 9) Roy E.Baiky. (2005). The Economics of Financial Markets. Cambridge University Press.

# SEMESTER-IV

Paper	Semester-IV	Credits
DSE-3	Data Analysis / Demography/MOOC	4L + 1T = 5
DSE-4	International Economics-II/ Public Finance	4L + 1T = 5
DSE-5	Econometrics-II/Financial Economics-II	4L + 1T = 5
Dissertation	Dissertation/Presentation	4D + 2P = 6

k 57 ch By.

# DSE-3 Data Analysis

Course Objective: This course aims to equip learners with the skills and knowledge to effectively analyze data using data analysis software's viz., SPSS, STATA and R. Students will learn how to leverage advanced tools and techniques, create interactive dashboards, and gain insights from complex datasets.

# **Learning Outcomes:**

- Proficiently use advanced statistical packages for data analysis, manipulation, and reporting.
- Understand the power of statistical application and its capabilities for data visualization and dashboard creation.
- Develop skills in connecting to various data sources, cleaning, and transforming data, and creating interactive dashboards.
- Gain insights from complex datasets and make data-driven decisions using SPSS, STATA, and R.

Unit 1: Role and Importance of Data analysis in Economics-Tyes of Data, Collection of Data, Sources of Data, and its Methods. Probability & Non-Probability Sampling.

Unit 2: Organization and classification of data, Diagrammatic Representation of Data-Fitting of Curves, Parabola, cubic and exponential, Box Plot, Scatter plot, Histogram, Bar and Pie charts-Computation of descriptive statistics.

Unit 3: The role of Software Packages in data analysis in Economics – Classification of Software packages –qualitative and quantitative data – Open sources and paid software - broadly used software packages in economic analysis.

Unit-4: Software's For Qualitative Data: Introduction to SPSS - Recoding into different variables and computing new variables – Graphical plots: Box Plot, Scatter plot, Histogram, Bar and Pie charts - Cross tabulation - Fitting of Curves: Parabola, cubic and exponential - Computation of descriptive statistics. Softwares for Quantitative Data: Introduction to EViews – R – STATA — Importing and exporting files – Data visualization - Transformation of variables – generating new variables – Summary statistics.

Unit 5: Tests of Hypothesis—Z test, t test, Chi-square test, F test, one-way and two-way ANOVA, Some non-parametric test—test for Goodness of fit, test of independence, test of homogeneity. Estimation of Correlation, and regression coefficients.

#### References:

- Andy Field (2009). Discovering Statistics Using SPSS (Introducing Statistical Methods Series). Third Edition, SAGE Publications Ltd.
- Christopher F. Baum (2016) An Introduction to Stata Programming. Second Edition Stata Press.

by on Et my

- Colin Cameron and P. K. Trivedi (2022) Micro econometrics Using Stata. Stata Press
- David S. Brown (2021) Statistics and Data Visualization Using R: The Art and Practice of Data Analysis. SAGE Publications, Inc.
- Gupta, S.C. (2018). Fundamentals of Statistics. Himalaya Publishing House. New Delhi.
- Stockemer, Daniel & Bordeleau, Jean-Nicolas. (2019). Quantitative Methods for the Social Sciences: A Practical Introduction with Examples in R. Springer International Publishing AG.
- Stockemer, Daniel. (2019). Quantitative Methods for the Social Sciences: A Practical Introduction with Examples in SPSS and Stata. Springer International Publishing AG.
- Young, Pauline V. (1939). Scientific Social Surveys and Research. New York: Prentice-Hall, Inc.

E of Ry

# Demography

Course Objective: This course will introduce the students to some of the major ideas and concepts in the areas of country's demographic structural changes, Fertility and Mortality, Migration and Urbanization, Basic Statistical Methods in Population Studies.

Course Learning Outcomes: Students will be able to identify various sources of data in demography. The study of the population growth and scenario of the world and India will generate employment opportunities in the field of census and population analysis among the students.

Unit 1- Demography: Meaning and Scope of Demography, Difference from Population Studies, Components of Population Growth, Population and Developments, Malthusian Theory, Neo-Malthusian, Optimum Theory and Theory of Demographic Transition.

Unit 2- Fertility and Mortality: Measurement of Fertility and Mortality Rate, Factors affecting Fertility and Mortality, Age-Pyramid, Population Projection, Characteristics of Indian Population, Population explosion.

Unit 3- Migration and Urbanization: Concept, Types, Patterns, Theories related to internal and International Migration; Urbanization Causes and Effects, Urbanization in India.

Unit 4- Basic Statistical Methods in Population Studies: Sources of Demographic Data, Life-Table: Basic Concepts of the Life Table; Types and Forms of Life Table, Preparation of Life Tables, Population policies in India, Strategy of Family Planning, Population and Strategies for human development, Population and Environment.

Unit 5- India's population: Population growth in India, Population scenario of India, population size, trend and growth in states, Trends of World Population, Trends of Population growth in developed and developing countries. Population problems and measures.

## Suggested Reading:

- 1. Agarwal S.N.: India's Population Problem.
- 2. Agarwal U.D.: Population Projections and their Accuracy.
- 3. Bhende, A.A. and T.R. Kanitkar: Principles of Population Studies.
- 4. Bogue, D.J.: Principles of Demography.
- 5. Bose A.: India's Basic Demographic Statistics.
- 6. Census of India, Government of India, Various Reports, New Delhi.
- 7. Choubey, P.K.: Population Policy in India.
- 8. Gulati, S.C.: Fertility in India: An Econometric Analysis of a Metropolis.
- 9. Misra, B.D.: An Introduction to the Study of Population.
- 10. Srinivasn, K. (Ed.): Population Policy and Reproductive Health.
- 11. M. L. Jhingan, Demography, Vrinda Publications.

a grand

# (MOOC Course)

## Course 1: Fundamentals of Economics and Financial Markets (3 Credits)

By Prof. Parul Jain, Prof. Anand Singh, Prof. Mayank Kumar Singh | DAV PG College, DAV PG College, DAV PG College

## ABOUT THE COURSE:

This online course will provide an understanding of the functions and operations of the financial markets and institutions and its role in the economic development. It also introduces participants to the fundamentals of economics & financial markets that are in the toolkit of policy makers. These tools are used to study the characteristics of various financial instruments and their pricing, analyze portfolio of assets, gaining familiarity with the basics of risk management.

INTENDED AUDIENCE: 10+2 pass candidates (from any stream or subject) or equivalent can apply to join this course "Fundamentals of Economics and Financial Markets". Candidates appearing or appeared in qualifying exams (i.e.10+2) may also apply. Students pursuing degree or diploma courses from any college, institute or university may also apply. Recent graduates from various degree courses may also be considered for taking admission.

**PREREQUISITES:** 10+2 pass candidates (from any stream or subject) or equivalent can apply to join this course. Candidates appearing or appeared in qualifying exams (i.e. 10+2) may also apply.

**INDUSTRY SUPPORT:** All the financial institutions, broking houses, research houses, depository houses etc needs financial analysts so they will certainly recognize this course.

Summary

Course Status	Upcoming Elective	
Course Type		
Language for course content	English	
Duration	12 weeks	
Category	Multidisciplinary	
Credit Points	3	
Level	Undergraduate/Postgraduate	
Start Date	20 Jan 2025	
End Date	11 Apr 2025	
Enrollment Ends	27 Jan 2025	
Exam Registration Ends	14 Feb 2025	
Exam Date	25 Apr 2025 IST	

Note: This exam date is subject to change based on seat availability. You can check final exam date on your hall ticket

be & Su ay

## Course Layout

#### Week 1:

Function & Relation Meaning of Hypothesis & Hypothesis Testing Concept of Probability Concept of Errors & Its Types Stochastic & Non-Stochastic Phenomenon

## Week 2:

Meaning and Functions of Money, High Powered Money Measures of Money Supply (RBI's Approach to Money Supply) Inflation Types- Demand Pull & Cost Push, Inflationary Gap Causes and Control of Inflation Phillip Curve

## Week 3:

Meaning & Definition of Financial System Components of Financial System Concept of Financial Assets Concept of Financial Services

#### Week 4:

Meaning & Structure of Money Market in India Instruments traded in Indian Money Market Features of a Developed Money Market Features of Indian Money Market Defects of Indian Money Market

#### Week 5:

Commercial Banks-Meaning and Functions
Process of Credit Creation
Central Bank-Functions & methods of credit control

#### Week 6:

Meaning & Functions of NIM

Pricing of Securities

Public Issues: Meaning & SEBI Guidelines Rights Issues: Meaning & SEBI Guidelines Private Placements: Meaning & SEBI Guidelines

le gr

### Week 7:

Concept of stock and flow, measurement of National Income Problems of Measurement of National Income Circular Flow of Income in two, three and Four Sectors

#### Week 8:

Meaning & Features of Old Stock Exchanges Organization of Stock Exchanges in India Functions of Stock Markets Defects of Indian Stock Markets

## Week 9:

A brief account of Keynesian theory of employment Keynes's Psychological Law of Consumption Theories of Consumption- Absolute, Relative, Life Cycle and Permanent

### Week 10:

Listing of Securities Dematerialization of Securities

NSE: Functioning & its Trading Pattern BSE: Functioning & its Trading Pattern OTCEI: Functioning & its Trading

#### Week 11:

Concept of Public Goods and Private goods Tax System-types, ability-to-pay approach Incidence and shifting of tax Tax avoidance and tax evasion

## Week 12:

Meaning and Types of Public Expenditure Theories of Public Expenditure - Wagner, Wiseman-Peacock Hypothesis Public Debt-Types and its Redemption

#### **Books and references**

- 1. The Indian Financial System: Markets, Institutions and Services, Author: Bharati V. Pathak. Publisher: Pearson (2012).
- 2. Financial Institutions and Markets: Structure, Growth & Innovation, Author: LM Bhole, Jitendra Mahakud, Publisher: Mc Graw Hill (2018).
- 3. Financial Markets & Services, Author: Dr. L. Natarajan, Publisher: Margham Publication.

of By-

- 4. Introduction to Financial Markets, Author: Suman Batra, Publisher: Orange House Pvt Ltd.
- 5. Hindriks, J., Myles, G. (2013). Intermediate Public Economics, 2nd ed. MIT Press.
- 6. Bagchi, Amaresh (2005); Readings in Taxation, Oxford Press
- 7. Shekhar & Shekhar, (1998): Banking Theory & Practice, Vikash Publishing House Pvt. Ltd.
- 8. Branson William (2006): Macroeconomics: Theory and Policy, AITBS
- 9. Rana, K.C. & Verma K.N: Macro Economic Analysis, Vishal Publishing House

# (MOOC Course)

# Course 2: Foundation Course in Managerial Economics (2 Credits)

By Prof. Barnali Nag | IIT Kharagpur

## About the course:

This course is developed to teach modern microeconomic theory to understand the behavior of household, firms and their interaction under different market structure. The purpose of this course is to provide students with a basic understanding of economic theory that can be used in managerial decision-making problems within various organizational settings such as a firm or a government agency. Objective is to develop a good understanding of economic concepts and tools that have direct managerial applications.

## Summary

Course Status	Upcoming	
Course Type	Elective	
Language for course content	English	
Duration	8 weeks	
Category	Management Studies  Managerial Economics	
Credit Points	2	
Level	Undergraduate/Postgraduate	
Start Date	20 Jan 2025	
End Date	14 Mar 2025	
Enrollment Ends	27 Jan 2025	
Exam Registration Ends	14 Feb 2025	
Exam Date	23 Mar 2025 IST	

## Course layout

- Week 1: Introduction, Demand and Supply.
- Week 2: Elasticity of demand and supply.
- Week 3: Government intervention and efficiency.
- Week 4: Producer theory and cost curves.
- Week 5: Market structures and perfect competition.
- Week 6: Monopoly and histology images.
- Week 7: Monopolistic competition
- Week 8: Oligopoly

& ST

# International Economics-II

## Course Outcomes

This course develops a systematic explanation the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It then builds on the models of open economy macroeconomics developed in courses, focusing on national policies as well as international monetary systems. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years.

### Unit1

Meaning and Components of Balance of Payments, Equilibrium and disequilibrium of Balance of Payments. Factors causing disequilibrium in balance of payments and measures to correct.

Unit 2 (10 Classes)

Adjustment mechanisms of Balance of Payments under flexible exchange rates (price effect), under elasticity approach Marshall Lerner condition, Foreign Trade Multiplier and determination of Income

Unit3 (15 Classes)

Concept of Foreign exchange rate, concepts of spot and forward exchange rates, Determination of Equilibrium exchange rate; Theories of exchange rate determination the purchasing power parity theory.

Unit 4 (10 Classes)

Factor causing changes in exchange rates. Relative merits and demerits of fixed and flexible exchange rates, Convertibility of currency

Unit 5 (10 Classes)

World Trade Organization – Objectives, Functions, India and WTO. International Monetary Fund, Objectives, Functions, India and IMF. World Bank Objectives, Functions, India and World Bank.

(15 Classes)

# READING LIST:

- Bhagwati, J. (Ed.): International Trade, Selected Readings.
- 2. Brahmananda, P. R.: The IMF Loan and India's Economic Future.
- Carbough, R.J.: International Economics.
- Chacholiades, M.: International Trade: Theory and Policy.
- 5. Corden, W.M.: Recent Developments in the Theory of International Trade.
- 6. Crockett, A.: International Money: Issues and Analysis.
- 7. Dana, M.S.: International Economics: Study, Guide and Work Book.
- 8. Dunn, R.M. and J.H. Mutti: International Economics.
- 9. Grable, J.O.: International Financial Markets.
- Greenway, D.: International Trade Policy.

1

Sy

m/

46

- 11. Heller, H. Robert: International Monetary Economics.
- 12. Jackson, J.: The World Trading System.
- 13. Kenen, P.B.: The International Economy.
- 14. Kindleberger, C.P.: International Economics.
- 15. King, P.G.: International Economics and International Economic Policy: A Reader.
- 16. Krugman, P.R. and M. Obstfeld: International Economics: Theory and Policy.
- 17. Linder, S.B.: An Essay on Trade and Transformation.
- 18. Manmohan Singh: India's Export Trends and the Prospects for Self-sustained Growth.
- 19. Mishkin, S.F.: The Economics of Money, Banking and Financial Markets.
- 20. Mundell, R.: International Economics.
- 21. Niehans, J.: International Monetary Economics.
- Panchmukhi, V.R., K.M. Raipuria and R. Tandon: Money and Finance in World Economic Order.
- 23. Pomfrert, R.: International Trade: An Introduction to Theory and Policy.
- 24. Salvatore, D.: International Economics.
- 25. Soderston, Bo: International Economics.
- Soloman, R.: The International Monetary System 1945-1981.
- 27. Tew, B.: The Evaluation of the International Monetary System: 1945-85.
- 28. Verma, M.L.: International Trade.
- 29. Whalley, John: Trade Liberalization Among Major Trading Areas.

of on on.

# **Public Finance**

Course Objectives: This course aims to provide students with a comprehensive understanding of public finance, focusing on the role of government in economic development and planning. It covers the concepts of public expenditure, taxation, public debt, and fiscal policy. The objective is to equip students with the knowledge to critically analyze government financial operations and their impact on the economy.

Learning Outcomes: After completing this course, students will be able to explain key concepts in public finance, including taxation, expenditure, and debt management. They will understand the theories of fiscal policy and their applications in developing economies. Students will also gain the ability to assess government interventions in the economy and evaluate their efficiency and effectiveness in promoting social welfare.

## Syllabus:

Unit1: Role of Govt. in Organized Society – Govt. as an agent for Economic Planning & Development, Concept of Public Goods, Private Goods and Merit Goods. Theory of Maximum, Social Advantage Theory - Dalton, Pigous, Musgrave.

(10 Classes)

Unit 2: Public Expenditure - Wagner's Law of Increasing State Activities, Wiseman Peacock hypothesis. Effects of Public Expenditure, Dalton's Norm of Public Expenditure, Fiscal policy and its objectives.

(15 Classes)

Unit 3: Economics of Taxation - Canons of Taxation, Taxable Capacity, Factors Determining Taxable Capacity, Its Significance. Theories of Taxation Benefit Theory, Incidence of Taxes, Effects of Taxation- Efficiency Effect, Incentive Effect.

(15 Classes)

Unit 4: Debt- Public Debt & Economic Growth, Public Debt and Inflation, Debt Burden, Crowding Out of Private Investment and Activity; Debt Redemption, Principles of Public Debt Management and Repayment, Defect financing.

(10 Classes)

Unit 5: Fiscal Policy- Objective of Fiscal policy, Tools of Fiscal policy, Compensatory Fiscal policy, Role of Fiscal policy in developing countries.

(10 Classes)

## READING LIST:

- 1. Atkinson, A.B. and J.E. Stiglitz: Lectures on Public Economics.
- 2. American Economic Association: Readings in Fiscal Policy.

48

la la

Sol

ay

- 3. Auerbach, A.J. and M. Feldstein (Eds.): Handbook of Public Economics.
- 4. Bird, R. and O. Oldman: Readings on Taxation in Developing Countries.
- Chelliah, Raja J.: Fiscal Policy in Underdeveloped Countries.
- Cutt, J.: Taxation and Economic Development in India.
- 7. Barman, K.: Public Debt Management in India.
- 8. Bhargava, R.N.: The Theory and Working of Union Finance in India.
- 9. Bhargava, P.K.: Taxation of Agriculture in India.
- 10. Bhargava, P.K.: Centre State Resource Transfers in India.
- 11. Bhargava, P.K.: India's Fiscal Crisis.
- 12. Chelliah, Raja J. et. al: Trends and Issues in India's Federal Finance.
- 13. Chelliah, R.J. (Ed.): Towards Sustainable Growth.
- 14. Datt, R. (Ed.): Second Generation Economic Reforms in India.
- 15. Gaur, A.K.: Federal Finance in India.
- Government of India: Reports of the Tax Reforms Committee Interim and Final (Chairman: Raja J. Chelliah).
- 17. Gulati, I.S.: Centre State Financial Relations, An Assessment of the Role of Finance Commission.
- 18. Houghton, J.M.: The Public Finance: Selected Readings, Penguin, Harmondsworth.
- 19. Jain, A.K.: Taxation of Income in India.
- 20. Jain, A.K.: Direct Taxation in India: Some Aspects.
- 21. Jain, I.: Resource Mobilization and Fiscal Policy in India.
- 22. Jha, R.: Modern Public Economics.
- 23. Menutt, P.: The Economics of Public Choice.
- 24. Mishan, E.J.: Cost-Benefit Analysis: An Informal Introduction.
- 25. Musgrave, R.A.: Theory of Public Finance.

ET St Ry

# **Econometrics - II**

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

### Unit-1

Regression Analysis and F-Test (Analysis of variance) one way, two ways.

## Unit- 2

Matrix Approach to Linear Regression Model. Assumptions, OLS Estimation and their properties. Interpretation of Results.

### Unit-3

Autoregressive Model: The Adaptive Expectation Model, Partial Adjustment Model, The Almon Approach to Distributed Lag Model.

#### Unit-4

Chow Test: Test of equality between coefficients, Application of LRM for estimation of Growth rate, demand function, production function.

# BASIC READING LIST

- Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge, Mass.
- 2. Baltagi, B.H. (1998), Econometrics, Springer, New York.
- 3. Dongherty, C. (1992), Introduction to Econometrics, Oxford University Press, New York.
- Goldberger, A.S. (1998), Introductory Econometries, Harvard University Press, Cambridge, Mass.
- 5. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Hill R. C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
- 7. Kennedy. P. (1998), A Guide to Econometrics (4th Edition), MIT Press, New York.
- Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.), The Macmillan Press Ltd., London.
- Krishna, K.L. (Ed.) (1997), Econometric Applications in India, Oxford University Press, New Delhi.
- Maddala, G.S. (Ed.) (1993), Econometrics Methods and Application (2 Vols.), Aldershot U. K.

1

1

8/2

My .

## Financial Economics-II

Course Objectives

This course builds on Financial Economics- I and goes deeper into the functioning of the financial markets and firm performance. Various security instruments used by firms to raise capital is discussed in different module. The third, fourth and fifth module deals with the derivative securities, investment management and financial market regulations. Students will also learn about capital market investment decisions of the firm.

## **Course Outcomes**

1. Knowledge

Explain the functioning of the financial markets. Elaborate on the different securities issued in the capital markets. Ability to analyse a financial statement. Evaluate the security issue decisions by firms.

2. Skill

The demand for highly skilled experts in financial economics continues to increase rapidly in the modern economy. This demand exists in the public sector (central banks, international organizations, academic institutions) and especially, in the private sector (commercial banks and insurance companies).

3. Application

In this course teacher taught the different concepts and practical applications related to security analysis and investment management embrace various employment opportunities in corporate and investment banking etc.

#### **Course Outline**

**UNIT-I: Security Analysis** 

Economy/Market Analysis- Assessing the Economy, Economy and Stock Market Booms, Understanding the Stock Market and Making Market Forecasts; Industry Analysis- Importance of Industry Analysis; Company Analysis- Fundamental Analysis, Accounting aspects of Earnings, ROE and EPS, Earnings Estimates, P/E Ratio; Technical Analysis- Stock Price and Volume Techniques, Technical Indicators, Testing Technical Analysis Strategies, Ebb and Flow of Technical Analysis.

UNIT-II: Fixed-Income Securities: Analysis, Valuation, and Management

Bond Yields and Prices- Bond Yields and Interest Rates, Measuring Bond Yields, Bond Prices, Bond Price Changes; Bonds: Analysis and Strategy- Why Buy Bonds, Important Considerations in Managing a Bond Portfolio, Bond Strategies and Techniques, Passive Management Strategies, Active Management Strategies, Managing Price Volatility.

**UNIT-III: Derivative Securities** 

Options- Introduction to Options, Understanding Options, Payoffs and Profits from Basic Option Positions, Basic Options Strategies, Option Valuation, Investor's Perspective on Puts and Calls, Stock-Index Options; Futures Contracts- Structure of Futures Markets, Mechanics of Trading, Using Futures Contracts, Financial Futures.

Civen corner experts

## **UNIT-IV: Investment Management**

Managing Financial Assets- Investing in Financial Assets, Managing Financial Assets, Appropriate Investment Strategy, Investor Objectives, Issues of Financial Planning for Investors, Implementing Investing Strategies, Financial Planning on an Ongoing Basis, Rebalancing a Portfolio of Financial Assets, Determining of Success of Financial Planning, Minimize Costs and Effort, Managing a Portfolio of Financial Assets; Evaluation of Investment Performance-Framework for Evaluating and Assessing Portfolio Performance, Performance Measurement Issues, Risk-adjusted Measures of Performance, Style Analysis and Performance Attribution, Money Managers and Performance Presentations

## **UNIT-V: Financial Market Regulations**

Importance of Regulations in Financial Markets- Role of Government & Regulatory Bodies-Ethics in Finance- Securities Contract Regulation Act- SEBI – UTI – insurance – IRDA — credit rating and agencies.

## **Books for Reference:**

- 1) Bharati V. Pathak. (2018). Indian Financial System. Pearson Education Ltd.
- Chandra, P. (2012). Investment Analysis and Portfolio Management. Tata McGraw-Hill Education Private Limited.
- 3) Fabozzi, F. J., Neave, E. H., & Zhou, G. (2011). Financial Economics. Wiley.
- 4) Fridson, M. S., & Alvarez, F. (2022). Financial statement analysis: A Practitioner's Guide. John Wiley & Sons.
- 5) John Hull. (2022). Futures, Options and Other Derivatives. Prentice Hall.
- Jones, Charles P. (2013). Investments: Analysis and Management. Wiley Publication, 12th ed.
- 7) M. Y. Khan. (2019). Indian Financial System. Tata McGraw Hill.
- 8) Mishkin, F. S., & Eakins, S. G. (2006). Financial Markets and Institutions. Pearson Education India
- 9) Pathak, B. V. (2018). Indian Financial System. Pearson Education India.
- 10) Reilly, Frank K, Brown, Keith C and Leeds, Sanford J. (2018). *Investment Analysis & Portfolio Management*. Cengage Publishing House, 11th Edition, USA.

5

Sign

29