

Scheme and Syllabi
for
M.A. Economics
as per NEP 2020

Curriculum and Credit Framework for
Postgraduate Programme



Department of Economics
Chaudhary Ranbir Singh University, Jind
w.e.f. 2024-25

Scheme and Syllabi for M.A. Economics as per NEP 2020 Curriculum and Credit Framework for Postgraduate Programme

Framework – 2

Scheme – S

Semester I

Course Type	Nomenclature of Paper	Course Code	Hours/week			Marks			Total Marks	Credit
			L	T	P	Theory	Internal	Practical		
CC-1	Micro Economics-I	M24-ECO-101	3	1	-	70	30	-	100	4
CC-2	Macro Economics-I	M24-ECO-102	3	1	-	70	30	-	100	4
CC-3	Indian Economy-I	M24-ECO-103	3	1	-	70	30	-	100	4
CC-4	Mathematics for Economist-I	M24-ECO-104	3	1	-	70	30	-	100	4
CC-5	Statistical Methods-I	M24-ECO-105	3	1	-	70	30	-	100	4
DEC-1 (Choose any one)	Labour Economics OR	M24-ECO-106	3	1	-	70	30	-	100	4
	Economics of Population OR	M24-ECO-107	3	1	-	70	30	-	100	4
	Computer Applications in Economics	M24-ECO-108	3	-	1	70	30	-	100	4
SEM	Seminar	M24-ECO-109	-	-	-	-	-	-	50	2
Total Credit=									26	

Semester II

Course Type	Nomenclature of Paper	Course Code	Hours/week			Marks			Total Marks	Credit
			L	T	P	Theory	Internal	Practical		
CC-6	Micro Economics-II	M24-ECO-201	3	1	-	70	30	-	100	4
CC-7	Macro Economics-II	M24-ECO-202	3	1	-	70	30	-	100	4
CC-8	Indian Economy-II	M24-ECO-203	3	1	-	70	30	-	100	4
CC-9	Mathematics for Economist-II	M24-ECO-204	3	1	-	70	30	-	100	4
CC-10	Statistical Methods-II	M24-ECO-205	3	1	-	70	30	-	100	4
DEC-2 (Choose any one)	Public Economics OR	M24-ECO-206	3	1	-	70	30	-	100	4
	History of Economic Thought	M24-ECO-207	3	1	-	70	30	-	100	4
CHM	Constitutional, Human and Moral Values and IPR	M24-CHM-201	2	-	-	35	15	-	50	2
Total Credit=									26	
Internship	An internship course of 4 credits of 4 -6 weeks duration during summer vacation after 2 nd semester is to be completed by every student Internship can be either for enhancing the employability or for developing the research aptitude.	M24-INT-200	-	-	-	-	100	-	100	4

Semester III

Course Type	Nomenclature of Paper	Course Code	Hours/week			Marks			Total Marks	Credit
			L	T	P	Theory	Internal	Practical		
CC-11	International Economics-I	M24-ECO-301	3	1	-	70	30	-	100	4
CC-12	Growth and Development-I	M24-ECO-302	3	1	-	70	30	-	100	4
DEC-3 (Choose any one)	Research Methodology-I OR	M24-ECO-303	3	1	-	70	30	-	100	4
	Money and Banking	M24-ECO-304	3	1	-	70	30	-	100	4
DEC-4 (Choose any one)	Environmental Economics OR	M24-ECO-305	3	1	-	70	30	-	100	4
	Monetary Economics	M24-ECO-306	3	1	-	70	30	-	100	4
DEC-5 (Choose any one)	Agricultural Economics-I OR	M24-ECO-307	3	1	-	70	30	-	100	4
	Industrial Economics-I OR	M24-ECO-308	3	1	-	70	30	-	100	4
	Computer Applications in Research	M24-ECO-309	3	-	1	70	30	-	100	4
DEC-6 (Choose any one)	Econometrics-I OR	M24-ECO-310	3	1	-	70	30	-	100	4
	Financial Institutions and Markets-I	M24-ECO-311	3	1	-	70	30	-	100	4
OEC	Basic Aspects of Indian Economy	M24-ECO-312	2	-	-	35	15	-	50	2
Total Credit=									26	

Semester IV

Course Type	Nomenclature of Paper	Course Code	Hours/week			Marks			Total Marks	Credit
			L	T	P	Theory	Internal	Practical		
CC-13	International Economics-II	M24-ECO-401	3	1	-	70	30	-	100	4
CC-14	Growth and Development-II	M24-ECO-402	3	1	-	70	30	-	100	4
DEC-7 (Choose any one)	Research Methodology-II OR	M24-ECO-403	3	1	-	70	30	-	100	4
	Gender Economics	M24-ECO-404	3	1	-	70	30	-	100	4
DEC-8 (Choose any one)	Rural Economy OR	M24-ECO-405	3	1	-	70	30	-	100	4
	Urban Economy OR	M24-ECO-406	3	1	-	70	30	-	100	4
	Haryana Economy	M24-ECO-407	3	1	-	70	30	-	100	4
DEC-9 (Choose any one)	Agricultural Economics-II OR	M24-ECO-408	3	1	-	70	30	-	100	4
	Industrial Economics-II OR	M24-ECO-409	3	1	-	70	30	-	100	4
	Welfare Economics	M24-ECO-410	3	1	-	70	30	-	100	4
DEC-10 (Choose any one)	Econometrics-II OR	M24-ECO-411	3	1	-	70	30	-	100	4
	Financial Institutions and Markets-II	M24-ECO-412	3	1	-	70	30	-	100	4
EEC	Entrepreneurship Development	M24-ECO-413	2	-	-	35	15	-	50	2
Total Credit=									26	

Semester IV

(Scheme of Semester IV when a student opts for Dissertation OR Project Work)*

Course Type	Nomenclature of Paper	Course Code	Hours/week			Marks			Total Marks	Credit
			L	T	P	Theory	Internal	Practical		
CC-13	International Economics-II	M24-ECO-401	3	1	-	70	30	-	100	4
DEC-9 (Choose any one)	Agricultural Economics-II OR	M24-ECO-408	3	1	-	70	30	-	100	4
	Industrial Economics-II OR	M24-ECO-409	3	1	-	70	30	-	100	4
	Welfare Economics	M24-ECO-410	3	1	-	70	30	-	100	4
DEC-10 (Choose any one)	Econometrics-II OR	M24-ECO-411	3	1	-	70	30	-	100	4
	Financial Institutions and Markets-II	M24-ECO-412	3	1	-	70	30	-	100	4
EEC	Entrepreneurship Development	M24-ECO-413	2	-	-	35	15	-	50	2
	Dissertation OR Project Work	M24-ECO-414	-	-	-	200	100	-	300	12
Total Credit=									26	

* Dissertation OR Project Work may be given to only 10 to 20 students on the basis of a criteria provided by the department.

CC- Core Course, DEC- Discipline Elective Course, OEC- Open Elective Course, EEC- Employability and Entrepreneurship Skills Course.

Semester-I
Micro Economics-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Demand and Supply Analysis: Nature and Scope of Micro Economics; Demand Analysis: Demand Function, Law of Demand, Elasticity of Demand (Price, Cross, Income) and their applications; Supply Analysis: Supply Function, Law of Supply, Elasticity of Supply and their applications;

Theories of Consumer Behaviour: Cardinal, Ordinal and Revealed Preference Theory; Slutsky and Hicks Price and Income Effect; Concept of Consumer Surplus.

Unit-II

Theory of Production: Production Function, Laws of Production: Short Run and Long Run; Technical Progress and Production Function; Properties of Cobb-Douglas and CES Production Function;

Theory of Costs: Concept and Types of Costs; Traditional and Modern Cost Theory; Economies of Scale; Internal and External economies and diseconomies.

Unit-III

Analysis of Markets: Profit Maximization and Equilibrium of Firm and Industry under Perfect Competition, Monopoly (including discriminating and bilateral monopoly), Monopolistic Competition; Price Discrimination: Meaning and Degree of Price Discrimination.

Unit-IV

Oligopoly: Non-Collusive Models- Cournot, Bertrand, Chamberlin, Kinked-Demand Curve and Stackelberg Model; Collusive Models- Market Sharing Cartels and Price Leadership Models.

Suggested Readings:

- Jehle & Renne (2011). Advanced Microeconomic Theory, Pearson Education, India. 3rd Edition.
- Koutsoyiannis, A. (2016). Modern Micro Economics. London: McMillan Press.
- Kreps, David M. (2012), "A Course in Microeconomic Theory", Princeton University Press, Princeton.
- Mankiw Gregory N (2017), "Micro Economics" Clengage Learning; 8th Edition.
- Mas-Colell, Andreu, Michael D. Whinston and Jerry R. Green, (1995). Microeconomic Theory, New York.
- Pindyck, Robert, S., Rubinfeld, D. L. & Gupta, P.L. (2018). Microeconomics. New Delhi: Prentice Hall of India.
- Salvatore, D. (2009). Microeconomics: Theory and Applications (4th ed.). Oxford University Press
- Sen, A. (2006), Microeconomics: Theory and Applications, Oxford University Press, New Delhi, 2nd Edition.
- Varian, H.R. (2009), Intermediate Microeconomics, Norton, New York.

Semester-I
Macro Economics-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Classical and Keynesian Approach: Nature and Scope of Macroeconomics, Determination of Output and Employment: Classical and Keynesian approach; Classical Model without Saving and Investment; Classical Model with Saving and Investment; Keynesian Approach: Two Sector Model, Three Sector Model and Four Sector Model; National Income: Concept and its Measurement.

Unit-II

Consumption and Saving Function: Concept and Determinants of Consumption; Keynesian Psychological Law of consumption; Consumption Theories: Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis, Life Cycle Income Hypothesis; Introduction of Saving Function.

Unit-III

Investment: Concept, Types and Determinants; Present Value of Criterion for Investment; Theories of Investment: Keynes Theory of Investment; Accelerator Theory of Investment; Jorgenson's Theory of Investment; Tobin q Theory of Investment; Investment Multiplier and Super Multiplier.

Unit-IV

Determination of Output and Employment: Extended Model (Hicks-Henson Synthesis) with Fixed Price Level: Goods Market and Money Market; Changes in Aggregate Demand with Govt. Spending and Taxation; The Extended Model under Variable Price Level: Deviation of Aggregate Demand Curve and Determination of Equilibrium Price and Output levels; Effectiveness of Fiscal-Monetary Policies and IS-LM curve.

Suggested Readings:

- Ackley, G (1978), "Macroeconomics: Theory and Policy, Macmillan, New York.
- Benson, W.A. (2005), "Macroeconomic Theory and Policy", Harper and Row, New York, 3rd Edition.
- Brooman, F. S. (1975). Macro Economics, George Allen and Unwin Ltd., London. 5th Edition.
- Dernburg, T.F. and D. M. McDougall, (2000), "Macroeconomics", McGraw Hill International Book Company.
- Dorn Busch, R. and F. Stanley (2013), "Macroeconomics", McGraw Hill, Inc. New York, 12th Edition.
- Dornbusch, R. (1980). Open Economy, Macro Economics, Basic Books, New York.
- Mankiw, N. Gregory (2012), "Macroeconomics", Macmillan worth Publishers, 8th Edition.
- Rana and Verma (2014), "Macroeconomic Analysis", Vishal publications, 11th Edition.
- Shapiro E (2017), "Macroeconomic Analysis", Galgotia Publications, New Delhi, 12th Edition.
- Sheffrin, Steven M. (2012), "Rational Expectations", Cambridge University Press, 2nd Edition.

Semester-I
Indian Economy-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Structure of Indian Economy: Nature and Characteristics of Indian Economy; Population Growth and Economic Development; National Income: Performance of Different Sectors; Planning: Objectives and Strategies, Failures and Achievements of Plan; NITI Aayog.

Unit-II

Unemployment in India: Types, Trends, Causes, Measurement and Government Policy for Removing Unemployment;

Poverty in India: Concept, Types, Causes, Estimates and Poverty Alleviation Programmes;

Income Inequalities: Income Inequalities in India, Causes and Schemes Launched by Government of India.

Unit-III

Indian Agriculture: Features and Role of Indian Agriculture; Land Reforms in India; Green Revolution; Minimum Support Price; CACP; Problem of Food Security, WTO and Indian Agriculture.

Unit-IV

Industry and Service Sector: Trends in Growth and Structure of Indian Industry; Micro and Small-Scale Industries; LPG Policy; Public Sector Enterprises and their Performance; Service Sector: Growth and Contribution of Service Sector in India.

Suggested Readings:

- Bardhan, P.K. (1999). The Political Economy of Development in India, 9th Edition, Oxford University Press, New Delhi.
- Byres, T. J. (Ed.) (1998). The Indian Economy: Major Debate since Independence, Oxford University Press, New Delhi.
- Dhar, P.K. (2014) Indian Economy- Its growing dimensions, Kalyani Publishers, New Delhi.
- Dutt Rudder and K P.M Sundaram (2018). Indian Economy, 72th Edition, S Chand & Co. Ltd. New Delhi.
- Economic and Political Weekly: Various Issues.
- Economic surveys, Government of India.
- Jalan, B. (2000). India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.
- Kapila Uma. (2018). Indian Economy: Policies and Performances, 18th Edition, Academic Foundation.
- Mishra S.K & V.K Puri. (2018). Indian Economy and —Its Development Experience, 35th Edition, Himalaya Publishing House.
- Reserve Bank of India: Report on Currency and Finance (Annual), Mumbai.

Semester-I
Mathematics for Economist-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Functions, Limits and Continuity: Concept and Types of Functions; Function in Economics; Fundamentals Theorem and Methods of Finding the Limits; Continuity and Discontinuity of Function;

Linear and Quadratic Equation: Definition, Methods of Solving Equation and their Economic Applications.

Unit-II

Matrices: Meaning and Types of Matrices; Transpose; Adjoint; Inverse of Matrices; Determinants; Solution of a System of Two and Three Equations by Matrix Method and Cramer Rule and its Economic Application;

Input-output Analysis: Structure, Assumptions, Properties, Static and Dynamic Model, Hawkins Simon Condition.

Unit-III

Differentiation: Simple, Partial and Total Differentiation with up to Second Order and its Economic Application; Homogenous Function with Properties;

Maxima and Minima: One and Two Variables and their Economic Application, Constraint Maxima and Minima with Economic Applications.

Unit-IV

Series Analysis: Arithmetic and Geometric Series and its Economic Applications;

Set Theory: Concept, Types, Elementary Operations and Laws of Set with Economic Applications;

Growth Rate: Simple, Compound, Exponential and their Measurement at Point of Time and Period of Time.

Suggested Readings:

- Allen, R.G.D (1983). Mathematical Analysis for Economist, Macmillan & Co Ltd.
- Arrow, K.J and Intrilligator (1982). Handbook of Mathematical Economics, Volume I, II, III, North Holland Amsterdam.
- Chaing Alpha. C (1984), Fundamental Method of Mathematical Economics, 3rd Edition.
- Chung, I.W (1993) Utility and Production: Theory and Application, Basil Blackwell.
- Dowling, Edward T (2015). Mathematics for Economists” (Schaum’s outline Series, Tata Mc- Graw Hill, 3rd Edition.
- Henderson, J.M and R.E Ouant (1980). Micro economic Theory: A Mathematical Approach, McGraw Hill.
- Yamane Taro (1972). Mathematical Analysis: Business and Economic Application, 4th Edition.

Semester-I
Statistical Methods-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Measure of Central Tendency: Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode;
Measure of Dispersion: Range, Interquartile Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Lorenz Curve, Kurtosis and Skewness.

Unit-II

Correlation Analysis: Concept, Types, Utility, Degree and its Techniques - Karl Pearson Coefficient of Correlation in Individual and Bivariate Series; Spearman Rank Correlation; Coefficient of Determination.

Unit-III

Regression Analysis: Concept, Types, Utility, Regression Lines, Regression Equations in Individuals and Bivariate Series, Regression Coefficients; Difference between Correlation and Regression; Properties of Regression Coefficient.

Unit-IV

Index Numbers: Problems and Construction of Indices: Laspeyres, Pasche's and Fisher's Ideal Index Number; Time Reversal, Factor Reversal and Circular Tests; Chain Base Indices, Base Shifting, Splicing and Deflating Index Number; Consumer Price Index Numbers.

Suggested Readings:

- Cochran, W. G., (1977) Sampling Techniques, John Wiley, New York.
- Croxton, F. E & D. J Cowden and S. K Klein (1973). Applied General Statistics, Prentice Hall, New Delhi.
- Gupta S. C. (2018). Fundamentals of Statistics, Himalaya Publishing house, New Delhi, 7th Edition.
- Gupta S.C and V.K Kapoor (2014). Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
- Gupta S.P. and Gupta M. P. (2014). Business Statistics, Sultan Chand and Sons, New Delhi.
- Hansen, Hurditz and Meadow (1953). Sample Survey Methods and Theory, John Wiley.
- Spiegel, M.R (1992). Theory and Problems of Statistics, 3rd Edition, McGraw Hill Books London.
- Yates, Frank. (1965). Sampling Methods for Census and Surveys, Charles, Griffin Co., London.

Semester-I
Labour Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Labour Market: Nature, Scope and Importance of Labour Economics; Labour Market Theories: Demand and Supply of Labour; Definition and Measurement of Labour Productivity; Factors Affecting Labour Productivity; Causes of Low Productivity of Labour in Developing Countries and Measures to improve Labour Productivity.

Unit-II

Industrial Relations: Concept and Scope of Industrial Relations; Indian Trade Unions: Types, Role, Growth and Problems; Emergence and Role of Union Collective Bargaining; Post-Reform Changes in Labour Unions; Industrial Disputes in India: Causes, Prevention and Settlement.

Unit-III

Wage and Employment: Determination of Wages; Wage Elasticity of Employment; Concepts of Minimum, Living and Fair Wage; Wage-Productivity and Inflation Relationship; Wage Policy in India: Minimum Wages Act and Payment of Wages Act.

Unit-IV

Social Security and Welfare: Definition and Scope of Social Security; Social Security Measures in India, Problems of Child Labour in India; Women Labour Force Participation: Determinants and Problems; Government Policies of Employment Generation; Major Recommendations of Second National Commission on Labour; International Labour Organisation: Objectives, Principles and Functions.

Suggested Readings:

- Hajela, P.D. (1998). Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publisher, New Delhi.
- International Labour Organization (ILO). 1996. Economic Reforms and Labour Policies in India, New Delhi: ILO.
- Lester, R.A. (1964). Economics of Labour, (2nd Edition), Macmillan, New York.
- McConnell, C.R. and S.L. Brue (2010). Contemporary Labour Economics, 9th Edition, McGraw Hill, New York.
- Mitra, A. (2009). Technology Import and Industrial Employment: Evidence from Developing Countries.” Labour 23 (4): 697-718.
- Papola, T.S., P.P. Ghosh and A.N. Sharma (1993). Labour, Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
- Shyam, S. K. R. (2015). Labour Law and Governance Reforms in India; Some Critical Perspectives. New Delhi: Synergy Books India.

Semester-I
Economics of Population

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Concept and Theories of Population: Meaning and Scope of Demography, Components of Population Growth and their Interdependence; Sources of Population Data; Theories of Population: Malthus, Optimum Theory of Population and Theory of Demographic Transition; Population as Limits to Growth and as Ultimate Source.

Unit-II

Structure and Determinants of Population: Determinants of Age and Sex Structure; Mortality- Death Rates, Crude and Age-Specific, Mortality at Birth and Infant Mortality rate; Measurement of Fertility: Total Fertility Rate, Gross and Net Reproduction Rate; Population Projection: Stable, Stationary and Quasi-Stationary Population; Life Table: Concept, Constructions and its Uses.

Unit-III

Migration: Concept, Classification and Factors affecting Migration; Theories of Migration: Ravenstein's Laws of Migration, Lee's Theory of Migration and Todaro Model.

Urbanization: Concept and Role of Urbanization in Economic Development; Growth and Distribution of Rural-Urban Population in Developing Countries with special Reference to India.

Unit-IV

Indian Population and Policy: Growth Rates, Trends and Age Structure of Indian Population, Latest Population Policy in India; Family Planning Strategies and their Outcomes, Social Impact of New Reproductive Technologies and their Regulations.

Suggested Readings:

- Agarwal, S. N. (1986). India's Population Problem, Tata McGraw Hill Co. Bombay.
- Bose, A. (1996). India's Basic Demographic Statistics, B. R. Publishing Corporation, New Delhi.
- Chenery, H. and T. N. Srinivasan (Eds.) (1989). Hand Book of Development Economics, Elsevier, Amsterdam.
- Choubey, P. K. (2001). Population Policy in India, Kanishka Publications, New Delhi.
- Coale, A. J. and E. M. Hoover (2016). Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects, Princeton University Press, Princeton.
- Simon, J. L. (2016). Population and Development in Poor Countries, Princeton University Press.
- Srinivasan, K. (1998). Basic Demographic Techniques and Applications, Sage, New Delhi.
- Srinivasan, K. and A. Shariff (1998). India: Towards Population and Demographic Goals, Oxford University Press, New Delhi.
- Novell. C (1988), Methods and Models in Demography, Bellhaven Press, London.
- Bogue, D.J (1971) Principles of Demography, John Wiley, New York.
- Dutt, Ruddra and Sundram K. P.M (2018)., Indian Economy, S.Ctiand& Company, New Delhi.

Semester-I
Computer Applications in Economics

Max Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30**

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction to Computer Fundamentals: Computer System, History and Classification of Computers; Input-Output Devices, Concept of Hardware and Software.

Unit-II

Operating System: Meaning and Functions; Types of Memory; Computer Languages: Machine, Assembly and High-Level Languages;

Data and Information: Meaning and Types of Data; Data Base Management System, Advantages and Limitations of Database System; Internet, Intranet, LAN, MAN, WAN, WWW, E-Mail, Search Engine, Social-media.

Unit-III

Fundamentals of MS-Word: Menus, Toolbars, Ruler, Scroll Bars, Status Bar; Editing and Formatting of Documents, Inserting Page Numbers and Footnotes, Table: Auto Format and Properties, Inserting Graphs and Diagrams.

Unit-IV

Introduction to Microsoft Excel: Creation of Worksheets; Data Entry, Formatting, Sorting and Validation; Importing and Exporting of Data Files; Preparation of Presentations in Power Point Using Design Template and Text Structure Layouts.

**** Internal marks will be based on practical file and viva-voce.**

Suggested Readings:

- Gardener, M. (2012): Beginning R: The Statistical Programming Language, Publisher John Wiley & Sons.
- Gupta, S.C. and V.K. Kapoor (2007). Fundamentals of Applied Statistics, 4th Edition, S. Chand and Sons, New Delhi.
- Kim, D. and Soloman, M.G. (2010) Fundamentals of Information System and Security, Publisher Jones & Bartlett Learning.
- Lipschultz, M.M. and S. Lipschultz (1982): Theory and Problems of Data Processing, Schaum's Outline Series, McGraw Hill, NY.
- Rajaraman, V. (2014), Fundamentals of Computers, 6th Edition, Prentice Hall of India, New Delhi.
- Sinha, P.K. (2017). Computer Fundamental, 6th Edition, BPB Publications, New Delhi.

Semester-II
Micro Economics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Theories of firm: Average Cost Pricing, Bain's Limit Pricing Theory; Baumol's Sales Revenue Maximization Model (all four static models); Marris Model of Managerial Enterprise; Williamson's Model of Managerial Discretion;

Theory of Games: Dominant Strategy and Nash Equilibrium; Cooperative and Non-Cooperative Games; Pure and Mixed strategy; Prisoner's Dilemma.

Unit-II

Theory of Factor Pricing: Factor Pricing under Perfect Competition: Demand for a Factor Input when One Input is Variable; Demand for a Factor Input when Several Inputs are Variable; Market Demand and Supply of Labour; Trade Off between Work and Leisure;

Factor Pricing under Imperfect Competition: Wage rate determination with Monopolistic Power in Product Market; Monopsonistic Power in Factor Market; Bilateral Monopoly in Factor Market; Monopoly in Factor Market., Factor Pricing and Income Distribution.

Unit-III

General Equilibrium: The Walrasian approach to General Equilibrium; Existence, Stability and Uniqueness of the Partial Equilibrium and General Equilibrium;

Welfare Economics: First and Second Theorem of Welfare Economics; Kaldor-Hicks Compensation Principle; Concept and Conditions of Pareto Optimality.

Unit-IV

Consumer Choice under Risk and Uncertainty: Concept and Measurement of Risk; Utility Theory and Attitude toward Risk: Risk Averter, Risk Lover and Risk Neutral; Risk-Return Trade off; Reducing Risk and Uncertainty;

Asymmetric Information: Adverse selection, Moral Hazard and Principal-Agent Problem.

Suggested Readings:

- Jehle & Renne (2011). Advanced Microeconomic Theory, Pearson Education, India. 3rd Edition.
- Koutsoyiannis A (2003). Modern Micro-Economics, McMillan Press London; 2nd Edition.
- Kreps, David M. (2012). A Course in Microeconomic Theory", Princeton University Press, Princeton.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Mankiw Gregory N (2017). Micro Economics, Clengage Learning; 8th Edition
- Mas-Colell, Andreu, Michael D. Whinston and Jerry R. Green (1995). Microeconomic Theory, New York.
- Pindyck Robert S Ruben Feld Daniel, Mehta (2009). Microeconomics, Prentice Hall of India, 7th Edition.
- Sen, A. (2006). Microeconomics: Theory and Applications, Oxford University Press, New Delhi, 2nd Edition.

Semester-II
Macro Economics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Concept and Demand for Money: Money and its Function; Classical Approach (Quantity Theory of Money): Fisher's and Cambridge Version; Keynesian Theory; Baumol and Tobin's Contributions; Friedman's Restatement of Quantity Theory of Money.

Unit-II

Money Supply: Measures and Determinants of Money Supply; Credit Creation by Commercial Banks; High Powered Money and Money Multiplier;

Interest Rates: Concept and Types, Theories of Interest Rate: Classical, Loanable Fund and Keynes Approach.

Unit-III

Inflation: Concept and Types; Economics effects of Inflation on Distribution of Income and Wealth, Output and Growth; Theories of Inflation: Demand Pull and Cost Push Inflation; Philips Curve Analysis: Short Run and Long Run views.

Unit-IV

Business Cycle: Meaning, Characteristics and Phases; Theories of Business Cycles: Samuelson, Hicks and Kaldor, Real Business Cycle Theory;

Open Economy IS-LM Framework: Determination of National Income in Open Economy; International Transmission of Disturbance: Transmission under Fixed and Floating Exchange Rate (Mundell Fleming Model).

Suggested Reading:

- Ackley, G (1978). Macroeconomics: Theory and Policy, Macmillan, New York.
- Benson, W.A. (2005). Macroeconomic Theory and Policy, Harper and Row, New York, 3rd Edition.
- Brooman, F. S. (1975). Macro Economics, George Allen and Unwin Ltd., London. 5th Edition.
- Dernburg, T.F. and D. M. McDougall, (2000). Macroeconomics, McGraw Hill International Book Company.
- Dorn Busch, R. and F. Stanley (2013). Macroeconomics, McGraw Hill, New York, 12th Edition.
- Dornbusch, R. (1980). Open Economy, Macro Economics, Basic Books, New York.
- Mankiw, N. Gregory (2012). Macroeconomics, Macmillan worth Publishers, 8th Edition.
- Peterson, W.C. (1996). Income Employment and Economic Growth, Norton, New York.
- Rana and Verma (2014). Macroeconomic Analysis, Vishal publications, 11th Edition.
- Shapiro E (2017). Macroeconomic Analysis, Galgotia Publications, New Delhi, 12th Edition.
- Sheffrin, Steven M. (2012). Rational Expectations, Cambridge University Press, 2nd Edition.

Semester-II
Indian Economy-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Infrastructure Development: Need, Performance of Physical and Social Infrastructure; Government Strategy on Infrastructure Development;

Rural and Urban Development: Issues, Challenges and Policy Responses; Sustainable Development.

Unit-II

Financial Sector in the Post-reform Era: Structure and Features of the Financial System in India; Financial Sector Reforms; Indian Money and Capital Markets: Structure, Role, Features and Reforms; Role of Securities Exchange Board of India (SEBI).

Unit-III

Foreign Trade of India: Structure and Direction; Balance of Payment; Latest Foreign Trade Policy; Foreign Direct Investment: Trends and Issues; Globalization of Indian Economy; Need and Issues of Good Governance.

Unit-IV

All India Financial Institutions: EXIM Bank; NABARD (National Bank for Agriculture and Rural Development); NHB (National Housing Bank); SIDBI (Small Industries Development Bank of India); NABFID (National Bank for Financing Infrastructure and Development).

Suggested Readings:

- Bardhan, P.K. (1999). The Political Economy of Development in India, 9th Edition, Oxford University Press, New Delhi.
- Byres, T. J. (Ed.) (1998). The Indian Economy: Major Debate since Independence, Oxford University Press, New Delhi.
- Dhar, P.K. (2014) Indian Economy- Its growing dimensions, Kalyani Publishers, New Delhi.
- Dutt Rudder and K.P.M Sundaram (2018). Indian Economy, 72th Edition, S Chand & Co. Ltd. New Delhi.
- Economic and Political Weekly: Various Issues.
- Economic surveys, Government of India Various Issues.
- Jalan, B. (2000). India's Economic Policy- Preparing for the Twenty First Century, Viking, New Delhi.
- Kapila Uma. (2018). Indian Economy: Policies and Performances, 18th Edition, Academic Foundation.
- Mishra S.K & V.K Puri. (2018). Indian Economy and —Its Development Experience, 35th Edition, Himalaya Publishing House.
- Reserve Bank of India: Report on Currency and Finance (Annual), Mumbai.

Semester-II
Mathematics for Economist-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Integration: Meaning and Economic Interpretation; Indefinite and Definite Integration; Method of Integration: Integration by Substitution and Integration by Parts and its Economic Applications.

Unit-II

Differential Equation: Basic Concepts, Solution of First Order Linear Differential Equation: Variable Separable; Exact Differential Equation; Linear Differential Equation of Second Order with Constant Coefficient and its Economic Applications.

Unit-III

Difference Equation: Basic Concepts, Solution of First and Second Order Linear Difference Equation with Constant Coefficient and its Economic Applications.

Unit-IV

Linear Programming: Relevance and Basic Concepts, Solution of Linear Programming Problem: Graphical Method; Duality in Linear Programming and its Economic Interpretations.

Suggested Readings:

- Allen, R.G.D (1983). Mathematical Analysis for Economist, Macmillan& Co Ltd.
- Arrow, K.J and Intrilligator (1982). Handbook of Mathematical Economics, Volume I, II, III, North Holland, Amsterdam.
- Chaing Alpha. C (1984). Fundamental Method of Mathematical Economics, 3rdEdition
- Chung, J.W. (1993). Utility and Production: Theory and Application, Basil Blackwell.
- Dowling, Edward T (2015). Mathematics for Economists (Schaum's outline Series, Tata Mc- Graw Hill, 3rdEdition.
- Henderson, J.M and R.E Quant (1980). Micro economic Theory: A Mathematical Approach, McGraw Hill.
- Yamane Taro (1972). Mathematical Analysis: Business and Economic Application, 4th Edition

Semester-II
Statistical Methods-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Probability: Addition, Multiplication, Bayes Theorem; Distribution of a Random Variable, Normal Distributions, Properties and Inter Relationships.

Unit-II

Sampling Fundamentals: Census versus Sample Enumeration; Methods and Types of Sampling, Sampling Error, Small and Large Sample, Concept of an Estimator and its Sampling Distribution; Properties of a Good Estimator, Concepts of Point and Interval Estimation.

Unit-III

Statistical Inference: Concept of Parameter and Estimators; Sampling Distribution of a Statistic, Standard Error, Confidence Interval, Hypothesis Testing, Type I and Type II Errors, Power of a Test, Test of Significance: T-test, Z-test and F-tests.

Unit-IV

Time Series: Meaning, Utility, Components and their Decomposition; Methods of Measuring Trend: Free Hand Curve Method, Semi Average Method, Moving Average Method and Least Square Method; Measurement of Seasonal Variation: Method of Simple Averages, Method of Moving Averages, Ratio to Moving Average.

Suggested Readings:

- Croxton, F.E & D.J Cowden and S.K Klein (1973). "Applied General Statistics", Prentice Hall, New Delhi.
- Gupta S. C. (2018). "Fundamentals of Statistics", Himalaya Publishing house, New Delhi, 7th Edition.
- Gupta S.C and V.K Kapoor (2014), "Fundamentals of Applied Statistics", S. Chand and Sons, New Delhi.
- Gupta S.P. and Gupta M. P. (2014). "Business Statistics", Sultan Chand and Sons, New Delhi.
- Hansen, Hurditz and Meadow (1953). "Sample Survey Methods and Theory", John Willey
- S. Cochran, W. G., (1977) Sampling Techniques, John Willey, New York.
- Spiegel, M.R (1992). Theory and Problems of Statistics", 3rd Edition, McGraw Hill Books London.
- Yates, Frank. (1965). Sampling Methods for Census and Surveys, Charles, Griffin Co., London.

Semester-II
Public Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Public Finance: Meaning, Scope and Importance; Market Failures and Externalities; Concepts of Private Goods and Public Goods, Mixed Goods and Merit Goods; Theory of Free Rider's Problem; Principle of Maximum Social Advantage; Theories of Public Goods: Samuelson and Lindhal.

Unit-II

Theory of Taxation: Concept, Canons and Classification of Taxes; Various Approaches to Taxation: Benefit Principle; Ability to Pay; Analysis of Incidence of Taxes; Elasticity, Buoyancy and Taxable Capacity; Tax Neutrality and Equity; Tax Systems in India: Structure and Composition; GST.

Unit-III

Public Expenditure: Meaning, Scope and Objectives; Public Expenditure Theories: Wagner's Hypothesis, Peacock Wiseman Hypothesis; Economic Effects of Public Expenditure; Structure and Growth of Public Expenditure in India.

Unit-IV

Budgeting: Meaning and Purpose of Budget, Zero Based Budgeting and Performance Budgeting, Budgets of the Union Government in India, Budget Making Process in India; Fiscal Federalism and Centre- State Relations, Finance Commission in India; Public Debt: Concept, Sources and its Management.

Suggested Readings:

- Raja J. Chaliah, (1996). Towards Sustainable Growth, Essays in Fiscal and Financial Sector Reforms in India, Oxford University Press, Delhi.
- Bhargava P.K. (1991), India's Fiscal Crisis, Ashish Publishing House, New Delhi. Govt. of India.
- Ministry of Finance (1988), Sarkaria Commission Report on Centre-State Finance Relation.
- Musgrave, R & Musgrave, P B (2017), "Public Finance in Theory and Practice", McGraw- Hill International, 5th edition.
- Atkinson, A B and Stiglitz, J E (2015) Lectures on Public Finance.
- Peacock, and Straw, G K (1976). The Economic Theory of Fiscal Policy.
- RaghbendraJha (2009). Modern Public Economics, Routledge, 1st edition.
- Govt. of India, Ministry of Finance: Finance Commission Reports (9th to 14th).
- Govt. of India, Ministry of Finance (1984) Sarkaria Commission Report on Centre State Financial Relations.
- Jones. Philip and Cullis, Jones (2009). Public Finance and Public Choice- Analytical Perspectives, Oxford University press.
- Stiglitz, Joseph (1989). Economics of the Public Sector, W.W. Norton and Company, New York/London. 4th Edition.

Semester-II
History of Economic Thought

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction: Nature and Importance of Economic Thought; Mercantilism: Rise of Mercantilism and its Main Ideas; Physiocracy: The Pre-Conditions of the Industrial Revolution, Ideas of Natural Order, Net Product and Circulation of Wealth.

Unit-II

Classical School: Theories of Value and Distribution: Adam Smith, Ricardo, J S Mill and Malthus.

Unit-III

Marxian Economics: Historical Materialism, Theory of Value, Theory of Capital Accumulation, Theories of Crisis, Rise and Fall of Capitalism;

Kalecki: Political aspects of Full Employment; Distribution of National Income.

Unit-IV

Indian Economic Thought: Kautilaya, Dadabhai Naoroji, Gandhian Thoughts, B.R.Ambedkar, V.K. R. V. Rao, C.N. Vakil, A.K. Sen.

Suggested Readings:

- Barber, William (1977). A History of Economic Thought, Penguin Books, 1977.
- Bell, John F (1967). A History of Economic Thought, Ronald Press, 1967
- Black, R. D.Collison (1986). Ideas in Economics, Barnes and Noble Books, 1986
- Blaug, Mark (1992). Economic Theory in Retrospect, Cambridge University Press.
- Buchholz, Todd (1990). New Ideas from Dead Economists, A Plume Book.
- Burt, Everett (1972). Social Perspectives in the History of Economic Theory, St. Martin's Press.
- Canterbury, Ray (1987). The Making of Economics, Wadsworth Publishing, 1987
- Canterbury, Ray (1995). The Literate Economist: A Brief History of Economics, HarperCollins, 1995.
- Dasgupta, A K (1986). Epochs of Economic Theory, Oxford University Press New Delhi.
- Paul R.R. (2015). History of Economic Thought, Kalyani publication, New Delhi.
- V. Lokanathan(2015). History of Economic Thought, S. Chand Publication.

Semester-III
International Economics-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction: Meaning, Need and Scope of International Economics; Mercantilists views on Trade;

Classical Theories of Trade: Smith, Ricardo and Haberler (Assumptions, Implications and Limitations).

Unit-II

Trade Theories: Reciprocal Demand Theory (Offer Curve Analysis), Heckscher-Ohlin, Stolper-Samuelson, Rybczynski and Factor Price Equalization Theorems, Empirical Evidence - the Leontief Paradox.

Unit-III

New Trade Theories: Intra-Industry Trade: Trade under the Assumptions of Imperfect Competition and Economies of Scale; Product-Cycle and Technology-Gap Models; The Diamond Model (Michael Porter); Measurement of Gains from Trade and their Distribution, Concepts of Terms of Trade.

Unit-IV

Barriers to Trade: Free Trade versus Protection; Need for Protection; Tariff and Non-Tariff Instruments of Trade Policy; Theory of Tariffs: Partial Equilibrium analysis of Tariff (Both Small Country and Large Country Case), General Equilibrium analysis of a Tariff (Both Small Country and Large Country Case); Optimum tariff.

Suggested Readings:

- Bhagwati, J. (2002). Free Trade Today, Oxford University Press.
- Ellsworth P T and J Clark Leith (1971). The International Economy, Collier Macmillan Ltd. London
- Human Development Report 2005, UNDP& Oxford, Chapter-4 (For Trade & Development).
- Kindlberger, C P, 1991, International Economics, R D Irwin, Homewood, 8th Edition.
- Krugman P.R. and Obstfeld D. (1994), International Economics: Theory and Policy. Third Edition. Harper Collins. New York.
- Krugman, P.R. Obstfeld, and Melitz (2012). International Economics, Pearson Addison Wesley-Boston.
- Paul, R Krugman& Maurice (2011). (9th Ed) International Economics, Theory and Policy Obstfeld-Wesley Series in Economics.
- Salvatore D L. (2016). International Economics, (12 edition) Wiley Publications.
- Salvatore, D L (2016). Theory and Problems of International Economics, Prentice Hall, Upper Saddle River, New York.
- Sawyer, W.C. and Sprinkle R.L. (2003). International Economics, Prentice-Hall of India, New Delhi.
- Soderston B O. (1999). International Economics, Macmillan Press Ltd. London.

Semester-III
Growth and Development-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Economic Growth and Development: Concept and Factors affecting Economic Growth, Historical Perspective of Economic Growth and its Relevance; Difference between Growth and Development, Measurement of Economic Development: PQLI, HDI and SDG's, Capabilities Approach.

Unit-II

Theory of Growth and Development: Adam Smith, Ricardo, Marx, Schumpeter, Lewis Theory of Development, Renis - Fei Theory, Rostow's Theory of stages of Economic Growth.

Unit-III

Strategies of Economic Growth: Balanced Growth, Unbalanced Growth, Critical Minimum Efforts, Big Push, Low-Income Equilibrium Trap.

Unit-IV

Economic Growth Models: John Robinson, Harrod- Domar Model, Neo-classical Growth Solow's Model, Steady State Growth, Kaldor Model.

Suggested Readings:

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Barro, R. and X. Salai- Martin, Economic Growth, McGraw Hill, New York.
- Brown, M. (1966). On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Chakravarti, S. (1982). Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989). Handbook of Development Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- Ghatak, S. (2003). Introduction to Development Economics, Indian Reprint 2007, Routledge, London.
- Higgins, B. (1959). Economic Development, W.W. Norton, 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, (8th Edition), Oxford University Press, New Delhi.
- Tadoro, Michael & Stephen C Smith (2017). Economics Development, Seventh Edition, Oxford University Press, New Delhi.
- Taneja M.L. and Myer R.M(2017). Economics of Development and Planning Vishal Publications.
- Thirlwall, A.P. (2011). Growth and Development, Seven Edition, Palgrave Macmillan, New York.

Semester-III
Research Methodology-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction to Research in Social Sciences: Meaning, Objectives, Significance and Limitations of Research in Social Science; Research Process; Ethical Considerations in Social Science Research.

Unit-II

Review of Literature: Need and Purpose for Reviewing Literature, Sources of Literature;

Types of Research: Fundamental, Applied, Action, Descriptive, Experimental, Correlational, Qualitative and Quantitative.

Unit-III

Research Design: Meaning, Need and Types of Research Design- Exploratory, Descriptive, Component of Research Design; Feature of Good Research Design.

Unit-IV

Hypothesis: Meaning, Significance, Types and Characteristics of a Good Hypothesis; Variables and their Relationship; Generalization; Verification of Theory: Inductive and Deductive Methods.

Suggested Readings:

- Ackoff R.L, The Designing of Social Research, University of Chicago Press, 1955
- Babbie, Earl, The Practice of Social Research, Thomson Asia Pvt. Ltd., Singapore; 2004
- Garrett H.E., Statistics in Psychology and Education, Vakils, Bombay, 1981
- Goode and Hatt, Methods in Social Research, Mc Graw Hill Co. Ltd., 1952
- Kerlinger, F.N., Foundation of Behavioural Research, Half Ronehart and Winston, New York, 1973
- Majumdar, P.K, Research Methods in Social Science, Viva Books Pvt. Ltd., New Delhi; 2005
- Matt Henn, et al., A short introduction to Social Research, Vistaar Publication, New Delhi; 2006
- Neuman, W.L., Social Research Methods: Qualitative and Quantitative Approaches (6thEd.), Pearson Education Inc., New Delhi; 2006
- Sarandakos, S., Research (2nd Ed.), Palgrave, New York; 1998
- Seltiz, C.H., Research Methods in Social Relations, Holt Rine Hart, and Winston, 1951
- Thakur, D, The Research Methodology in Social Sciences, Deep and Deep Publications, New Delhi, 1998
- Young P.V., Scientific Social Survey and Research, Prentice Hall New Jersey, 1956

Semester-III
Money and Banking

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Money and Money Supply: Barter System; Functions and Types of Money; Post-War Controversy on the Definition of Money; Distinguish Money from Near Money Assets; Money Supply: Components and Factor affecting the Supply of Money; Credit Creation by the Banking System.

Unit-II

Central Banking: Origin, Evolution and Function of Central Bank; Quantitative and Qualitative Methods of Credit Controls; Recent Monetary Policy of RBI; Autonomy of RBI.

Unit-III

Commercial Banking: Origin, Functions and Types of Commercial Banks in India; Banking Sector Reforms, Major Developments in Commercial Banking in India since Reforms (including mergers); Money and Capital Market: Structure, Instruments and Role.

Unit-IV

Financial Institutions: Role, Growth and Structure of Non-Banking Financial Institutions (NBFIs) in India; Types and Control of Non-Banking Financial Companies (NBFCs); SEBI: Role and Functions; IMF as provider of International Liquidity.

Suggested Readings:

- Bhole, L.M. (2016). Financial Institutions and Markets. Tata McGraw Hill.
- Bofinger, P. (2001). Monetary Policy: Goals, Institutions, Strategy and Instruments. Oxford University Press.
- Dennis Geogrey, E.J. (1981). Monetary Economics. Longman.
- Desai, V. (2019). The Indian Financial System and development. Himalaya Publishing House.
- Diulio, A. E. (1987). Theory and Problems of Money and Banking. International Edition (Schaum's Outline Series).
- Fabozzi, F. J. & Franco (2009). Capital Markets Institutions and Instruments, (4th ed.). New Jersey: Prentice Hall, Modigliani.
- Gordon, E. & Natarajan, K. (2019), Financial Markets & Services. Himalaya Publishing House.
- Howells, P. & Bain, K. (2002). The Economics of Money, Banking and Finance. Prentice Hall, Pearson Education Ltd.
- Khan, M.Y. (2017). Indian Financial System. Tata McGraw Hill.
- Kulkarni, G. (1999). Modern Monetary Theory. New Delhi: Macmillan.
- Mankiw, N.G. (2008). Macro-economics. New York: Macmillan Worth Publishers.
- Mohan, R. (2009). Monetary Policy in a Globalized Economy – A Practitioner's View. Oxford University Press.

Semester-III
Environmental Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit- I

Introduction: Meaning, Subject Matter, Nature and Scope of Environmental Economics; Relation Between Environment and Economy (Inter Linkages); Market Failure Associated with Environment: Reasons and Solutions; Green Accounting.

Unit-II

Economics of Pollution Control: Damage and Abatement Cost Functions; Costs and Benefits Analysis; Economic Solutions to Environmental Problems: Pollution Taxes, Environmental Subsidies, Deposit and Refund Systems, Pollution Permit Trading Systems, Command-and-Control Approach.

Unit-III

Environment Valuation: Meaning, Measures of Economic Value of Environment WTP and WTAC; Contingent Valuation Method; Travel Cost Method; Hedonic Market Method; Concept of Environment Values: Use and Non-Use Value.

Unit-IV

Global Environmental Pollution: Acid rain, Ozone Depletion and Global Warming (Causes, Consequences and Solutions); Role of State in Environmental Preservation: Environmental Legislation in India; International Environment Agreements: Kyoto protocol, RIO conventions; UNFCCC.

Suggested Readings:

- Bhattacharya R.N. (2001). Environmental Economics- an Indian Perspective (OUP).
- Chary, S.N. and Vyasulu, Vinod (2000). Environmental Management - an Indian Perspective, Macmillan, New Delhi.
- Cropper, Maureen (1999). Valuing Environmental Benefits, Edward Elgar.
- Hanley, N, J.F Shogern and B. White (1997). Environmental Economics in theory and practice, Macmillan Publications.
- Hussen A.M (1999). Principals of Environmental Economics, Routledge London.
- Jeroen. C.J.M. van den Berg (1999). Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd., U.K.
- Pearce, D.W. and R. Turner (1991). Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore
- S. James, A.J., M. N. Murty and Smita Misra (1999). Economics of Water Pollution—The Indian Experience, Oxford University Press, New Delhi.
- Shankar U. (2001). Environmental Economics, Oxford University press, New Delhi.
- Kumar, D. and Phougat, S. (2022). Environmental Economics: Theory and Practice, Academic Publication, New Delhi.

Semester-III
Monetary Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Theories of Money: Money Supply and Money Demand-Classical, Keynesian, Monetarist and Post-Keynesian views: Baumol and Tobin; Emergence of Monetarism; Gurley-Shaw approach.

Unit-II

Money, Interest and Income: Heterogeneity of Interest Rate Determination- Neo-Classical, Keynesian and IS-LM Curve Approach; Administered Interest Rates and Market Determined Interest Rates.

Unit-III

Money and Prices: Interrelationship between Money and Prices- Classical, Keynesian, Monetarist and New Classical Approach; Demand Pull and Cost Push Theory of Inflation, Social Costs of Inflation, Phillips Curve; Monetary Theories of Business Cycles: Hawtrey and Hayek.

Unit-IV

Central Banking and Monetary Policy: Origin, Structure and Functions of Reserve Bank of India; Monetary Policy- Concept, Goals, Indicators and Instruments, Limitations of Monetary Policy, Time Lags in the Monetary Policy, Effectiveness of Monetary Policy, IMF: Significance, Opportunities and Challenges.

Suggested Readings:

- Hajala T.N. (1998) Monetary Economics, Kanark Publishers Pvt. Limited, New Delhi
- Shubik Martin "The Theory of Money and Financial Institutions" (1999), Volume I and II Cambridge, the MIT Press.
- Stiglitz, Joseph E and Bruce E. Greenwald (2003), Towards a New Paradigm in Monetary Economics, Cambridge, the Cambridge University Press
- Suraj B. Gupta (2004) Monetary Economics; Institutions, Theory and Policy, S. Chand & Company Limited, New Delhi.

Semester-III
Agricultural Economics-I

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Agriculture and Economic Development: Definition, Scope and Nature of Agriculture Economics; Indian Agriculture: Features, Problems and Trends; Agricultural Productivity in India: Causes of Low Productivity and Suggestions to Increase Productivity in India; Role of Agriculture in Economic Development.

Unit-II

Theories of Agricultural Development: Lewis Model of Unlimited Supply of Labour; Fei-Ranis (FR) Model of Dual Economy; Boserup's Stages of Agricultural Development; Schultz Theory of Transformation of Traditional Agriculture; Mellor Theory of Agricultural Development.

Unit-III

Land Reforms: Meaning, Objectives and Implementation of Land Reforms in India;

Green Revolution: Factors Responsible for Green Revolution; Economics Benefits of Green Revolution; Measures for making Green Revolution all Pervasive; Regional Disparities created by Green Revolution.

Unit-IV

Agricultural Credit: Importance, Sources (Formal and Informal) and Problems; Rural Saving and Capital Formation; Role of NABARD and Regional Rural Bank in reorganizing of Rural Credit;

Agriculture Price Policy: Origin, Objectives, Need, Instruments, Shortcomings and Suggestions to Improve Agricultural Price Policy in India.

Suggested Readings:

- Acharya, S.S. & Agarwal N.L., Agricultural Prices - analysis and policy, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- Basu, K. Agrarian Structure and Economic Under Development (Harwood Academic, London 1980).
- Donner, Peter: Land Reforms and Economic Development, New Delhi.
- Heady, E.O. Economics of Agricultural Production and Resources Use (Prentice Hall India Ltd. New Delhi - 1964).
- Mellor, J. W. The Economics of Agricultural Development (Vora and Co. Bombay, 1966).
- Metacalf D. The Economics of Agriculture.
- R.N. Soni (2005): Leading Issues in Agricultural Economics, Vishal Publishing House
- Sadhu, AN. and A Singh, Agricultural Problems in India (Himalaya Publishing House, Bombay).
- Schult, T.Z. Transforming Traditional Agriculture (Yale University Press, 1964).
- South-worth, H.M. and B.F. Johnston (ed.) Agricultural Development and Economic Growth (Cornell University Press, London, 1974).

Semester-III
Industrial Economics-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Industrial Organization: Meaning, Need and Scope of Industrial Economics; Concept and Organization of a Firm: Ownership, Control and Objectives of the Firm; Passive and Active Behaviour of the Firm; Separation of Ownership from Management and Control.

Unit-II

Market Structure: Meaning and Determinants; Seller's and Buyer's Concentration; Product Differentiation; Entry Conditions; Economies of Scale and Barriers to Entry; Market Structure and Innovation; Market Structure and Profitability.

Unit-III

Theories of Industrialization: Hoffman, Chenery and Gershenkron; Theories of Industrial Location: Weber, Sargent and August Losch theories, Hotelling's Location Model; Factors Affecting Location.

Unit-IV

Methods of Product Pricing: Pricing-Oriented Methods: Mark-Up, Cost-Plus, Break-Even; Market-Oriented Methods: Going-Rate Pricing, Premium Pricing, Peak-Load Pricing; Predatory Pricing; Non-Linear Pricing Practices: Price Discrimination.

Suggested Readings:

- Bains, J.S Industrial Organization, Cheltenham, U.K.: An Elgar Critical Writings Reader, 1996.
- Barthwal, R.R.: Industrial Economics, New Delhi: Wiley Eastern Ltd, 1985.
- Devine, P.J. & R.M. Jones (et. al.): An Introduction to Industrial Economics, George Allen & Unwin Ltd., London, 1979.
- Hay, D.D.A & D.J. Morris: Industrial Economic Theory and Evidence, Oxford University Press, 1979.
- Herndeen, J.B.: The Economics of the Corporate Economy, Dunellin Publishing Co. New York, 1975.
- Kamien, M.T. & N.L.Schwartz : Market Structure and Innovation, Cambride University Press, Cambridge, 1982.
- Kirkpatrick, C.M. N. Lee & E.I. Nixon: Industrial Structure and Policy in Less Developed Countries, ELBS/George Allen & Unwin, 1984.
- Patel, S.J.: Technological Transformation in the Third World, Aldershot Avebury, 1993.
- Ramamurti, R. & R.Vernon (ed.) : Privatization and Control of Stateowned Enterprises, Washington. The World Bank, Washington, 1991

Semester-III
Computer Applications in Research

Max Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30**

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Data Analysis using MS Excel: Meaning, Entering Formulas, Mean, Mode, Median, Correlation, Simple Regression, Construction of Index Numbers, Growth Rates, Forecasting, Entering Array Formula, Making Graphs and Diagrams in MS-Excel.

Unit-II

Advance Applications in MS Excel: Logical Functions, Add-in option, Correlation and Multiple Regression, Applications of T-test, Chi square test and F-test, One way ANOVA.

Unit-III

SPSS: Introduction to SPSS Software, Data Entry in SPSS, Properties of Variables, Data Editor, Variable view and Output view, Inserting Variables, Editing and Computing Variables, Descriptive Statistics.

Unit-IV

Analysis in SPSS: Correlation and Regression Analysis in SPSS, Multiple Regressions, One Sample T-test, Paired Sample T-test, Cross Tabs; Exporting and Importing Data.

**** Internal marks will be based on practical file and viva-voce.**

Suggested Readings:

- Amir D Aczel Books (2012), (Complete Business Statistics 7th Edition), Mcgraw Hill.
- Bhattacharjee Dibyojyoti (2010), Practical Statistics: Using Microsoft Excel, Asian Books, Asian Books Private Limited, New Delhi.
- George, Darren Mallery Paul (2011) SPSS for Windows step by step: A simple guide and reference Pearson Education, New Delhi.
- ITL Education Solution Limited (2012), Introduction to information Technology, Pearson, New Delhi (ISBN 978-81-317-6029-1).

Semester-III
Econometrics-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction to Econometrics: Nature, Meaning and Types of Econometrics; Difference between Mathematical Economics, Statistics and Econometrics;

Simple and General Linear Regression Model: Assumptions, OLS Estimates and their Properties; Gauss-Markov Theorem.

Unit-II

Simple Applications of Least Square Estimation: Estimation of Consumption Function, Cobb-Douglas and Estimation of Semi-Log and Double Log Function; Concepts of R^2 and Adjusted R^2 .

Unit-III

Econometric Problems: Nature, Consequences, Test and Remedial Steps of Problems of Heteroscedasticity, Multicollinearity and Auto-Correlation.

Unit-IV

Simultaneous Equations Models: Nature of SEM's, Simultaneous Equation Bias and Inconsistency of OLS Estimators; Identification Problem; Rules of Identification: Order and Rank Conditions.

Suggested Readings:

- Dhrymes, Phoebus (2017). Introductory Econometrics, Springer, Nov. 2017.
- Frances, P. H. (1998), Business and Economic Forecasting, Cambridge University Press, Cambridge.
- Gream, Wiilliam (2000). Econometrics Analysis, 8th Edition, 2018 Prentice Hall.
- Gujarati, N Damodar, Dawn, C. Porter, Sangeeta, Gujasekar, (2011). Basic Econometrics, S" Edition, McGraw Hill.
- Intrilligator, M.J. and HasioBadkin (1996), Econometric Models, Techniques and Applications, Prentice Hall
- Johnson J. and Dinardo, J. (1991). Econometric Methods, 4" Edition, McGraw Hall Book Co. London
- Kmenta J. (1998). Elements of Econometrics, University of Michigan Press, NewYork
- Koutsoyiannis, A. (1997), Theory of Econometrics (2nd Edition), The Macmillan Press Ltd., London.
- Krishna K.L. (1997), Econometrics Application in India, Oxford University Press, New Delhi.
- Maddala, G.S and Lahari, Kajal (2009) Introduction to Econometrics, 4" Edition 2009, Wiley.
- Madnani, G.M.K. (1999), Introduction to Econometrics.
- PattersonKerry.P (2000). An Introduction to Applied Econometrics, Vol.1, Oxford U.K, Blackwell Publishing.
- Pindyck, R.S. and D.L. Rubinfeld (1976), Econometric Models and Economic Forecasts, McGraw Hill, Tokyo.

Semester-III
Financial Institutions and Markets-I

Max. Marks: 100
Time: 3 Hours

Theory Marks: 70
Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Financial System: Nature and Role of Financial System; Financial Intermediaries: Functions and Types; Indian financial system: An overview; Financial Sector Reforms in India since 1991.

Unit-II

Equilibrium in Financial Markets: Financial System and Economic Development; Criteria to Evaluate Assets: Risk and Financial Assets, Types of Risk, Return on Assets, Risk-Return Trade Off; Valuation of Securities.

Unit-III

Theories of Interest Rate Determination: Level of Interest Rates: Long Period and Short Period Rates; Term Structure of Interest Rates: Expectation Theory, Liquidity Premium Theory and Segmentation Theory; Interest Rates in India: Structure and Determinants.

Unit-IV

Commercial Bank: Meaning, Characteristics and Functions of Commercial Banks, Structure of Commercial Banks in India.

Non-Bank Financial Intermediaries: Meaning, Types, Functions, their Growth and Impact on India's Economic Development; Control and Regulation of NBFCs.

Suggested Readings:

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Market and Management, McGraw Hill, New York.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.
- Hanson, J.A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-century
- Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New Delh

Semester-III
Basic Aspects of Indian Economy (Open Elective)

Max. Marks: 50

Time: 3 Hours

Theory Marks: 35

Internal Marks: 15

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Features of Indian Economy: Nature and Characteristics of Indian Economy; Concept of Economic Growth and Development; Determinants of Growth; Sustainable Development.

Unit-II

Indian Agriculture: Role and Features of Indian Agriculture; Issues of Food Security; Green Revolution; Land Reforms in India.

Unit-III

Industry and Service Sector: Industry as the Engine of Growth; Determinant of Industrialization; Micro and Small-Scale Industries; Growth and Contribution of Service Sector in India; LPG Policy.

Unit-IV

External Sector: Foreign Trade: Meaning and Component; Trade as an Engine of Economic Growth; Foreign Capital: Meaning, Need and Components; Globalization and its Impact of Indian Economy; India and World Trade Organisation.

Suggested Readings:

- Bardhan, P.K. (1999). The Political Economy of Development in India, 9th Edition, Oxford University Press, New Delhi.
- Byres, T. J. (Ed.) (1998). The Indian Economy: Major Debate since Independence, Oxford University Press, New Delhi.
- Dhar, P.K. (2014) Indian Economy- Its growing dimensions, Kalyani Publishers, New Delhi.
- Dutt Rudder and K.P.M Sundaram (2018). Indian Economy, 72th Edition, S, Chand & Co. Ltd. New Delhi.
- Economic and Political Weekly: Various Issues.
- Economic surveys, Government of India Various Issues.
- Kapila Uma. (2018). Indian Economy: Policies and Performances, 18th Edition, Academic.
- Mishra S.K & V.K Puri. (2018). Indian Economy and Its Development Experience, 35th Edition, Himalaya Publishing House.
- Reserve Bank of India: Report on Currency and Finance (Annual), Mumbai.

Semester-IV
International Economics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Balance of Payment: Meaning and Component, Equilibrium and Disequilibrium in Balance of Payment;

BOP Adjustment: BOP Adjustment under Gold Standard; Fixed and Flexible Exchange Rates; Elasticity, Monetary and Absorption approach to Balance of Payment Equilibrium.

Unit-II

Foreign Exchange Markets: Meaning and Functions; Foreign Exchange Rate: Arbitrage, Spot and Forward Rates, Currency Swap, Future and Options; Foreign Exchange Risks, Hedging and speculations; Theories of Foreign Exchange Rates Determination: Mint Par Parity Theory; Purchasing Power Parity Theory; Balance of Payment Theory.

Unit-III

Foreign Trade Multiplier: Meaning and Working of Foreign Trade Multiplier; Foreign Repercussion or Back Wash Effect;

Economic Integration: Concept, Forms and Benefits of Economic Integration; Theory of Customs Union: Static and Dynamic Effects of Custom Union; Effects of Trade on Poverty, Inequality, Environment, Gender, Labour Standards, Technological Transfers Etc.

Unit-IV

International Monetary and Trade System: Rise and Fall of Gold Standard and Bretton-Wood System; IMF Operations and International Liquidity; World Bank; Functions and Achievements of World Trade Organization; India and WTO.

Suggested Readings:

- Ellsworth P T and J Clark Leith (1971). The International Economy, Collier Macmillan Ltd. London
- Kindlberger, C P, 1991, International Economics, R D Irwin, Homewood, 8th Edition.
- Krugman, P.R. Obstfeld, and Melitz (2012). International Economics, Pearson Addison Wesley- Boston
- Paul, R Krugman & Maurice (2011). (9th Ed) International Economics, Theory and Policy Obstfeld— Wesley Series in Economics.
- Salvatore D L. (2016). International Economics, (12 edition) Wiley Publications.
- Salvatore, D L (2016). Theory and Problems of International Economics, Prentice Hall Upper Saddle River, New York.
- Sawyer, W.C. and Sprinkle R.L. (2003), International Economics, Prentice-Hall of India, New Delhi.
- Soderston B0. (1999). International Economics, Macmillan Press Ltd. London.

Semester-IV
Growth and Development–II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Approaches to Development: Characteristics of Underdevelopment and Structural Change; Techniques of Planning; Features and Objectives of Economic Planning; Endogenous growth; Role of Education, Research and Knowledge in Economic Development and Growth.

Unit-II

Sectoral Aspects of Development: Role of Agriculture and Industry in Economics Development; Barriers to Agricultural Development, Transformation of Traditional Agriculture, Interdependence of Agriculture and Industry.

Development and Environment: The Basic Issues, Traditional Economic Models of the Environment, Policy Options for Developing and Developed Countries, Environmental Degradation and Sustainable Economic Development.

Unit-III

Role of the State in Development: An Overview of the Economic Functions of the Market and State; Market Mechanism and Market Failures; Nature and Rationale for Development Planning; Planning and Market: Planning by Direction, Planning by Market and Planning in Backward Areas; Fiscal Policy for Development.

Unit-IV

Trade and Development: International Trade as an Engine of Growth; Gains from Trade, The Prebisch Doctrine, Trade Policy Debate: Export Promotion, Import Substitution and Economic Integration; Trade liberalization and Economic Growth.

Suggested Readings:

- Behrman, S. and T.N. Srivasan (1995), Handbook of Development Economics, Vol.-3, Elsevier, Amsterdam.
- Chenery, H.B. et al. (Eds.) (1974), Redistribution with Growth, Oxford University Press,
- Ghatak, S. (2003). Introduction to Development Economics, Indian Reprint 2007 Routledge, London and New York.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Meier, G.M & Rauch (2000). Leading Issues in Economic Development, Oxford University Press, and New York.
- Ray, Debraj (2004). Development Economics”, Seventh Edition, Oxford University Press, New Delhi.
- Rist, G. (2002). The History of Development Academic Foundation, New Delhi
- Tadoro, Michael & Stephen C Smith (2017). Economics Development, Seventh Edition, Oxford University Press, New Delhi.
- Thirlwall, A.P. (2011). Growth and Development, Seven Edition, Palgrave Macmillan, New York.

Semester-IV
Research Methodology-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Data Collection: Meaning and Types of Data, Data Collection: Meaning, Types and Sources of Data (NSSO, ASI, NFHS, RBI), Techniques of Data Collection: Observation, Schedule, Questionnaire, Interview, Case Study and Mixed Method.

Unit-II

Sampling: Census vs. Sampling; Probability Sample and Non-Probability Sampling; Sampling Frame; Sampling Error; Sample Size; Characteristics of Good Sample; Reliability and Validity.

Unit-III

Data Analysis Software and Analysis Techniques: Spreadsheets, Sort and various Functions; Presentation; Cleaning of Data and its Coding; Graphical and Tabular Presentation of Data.

Unit-IV

Report Writing: Meaning, Purpose and Types of Reports; Steps, Format and Final Presentation of Research Report; Falsification, Fabrication and Plagiarism (FFP); Plagiarism: Concept and Significance of Plagiarism.

Suggested Readings:

- Ackoff R.L., The Designing of Social Research University of Chicago Press, 1955
- Babbie, Earl, The Practice of Social Research, Thomson Asia Pvt. Ltd., Singapore; 2004
- Bose P.K., Research Methodology (Third Survey) Monography of ICSSIL New Delhi
- Garett H.E., Statistics in Psychology and Education, Vakils Bombay, 1981
- Giddens, A., New Rules of Sociological Methods, Stanford University Press; 1993
- Goode and Hatt, Methods in Social Research: Mc Graw Hill Co. Ltd., 1952
- Kerlinger, F.N., Foundation of Behavioural Research Half Ronehartand Winston, New York, 1973
- Lazarsfeld, P.F., On Social Research and Its Language, University of Chicago Press, 1993
- Majumdar, P.K., Research Methods in Social Science, Viva Books Pvt. Ltd., New Delhi; 2005
- Martin H., The Philosophy of Social Science: An Introduction, Cambridge University press, 2000
- Matt Henn, et al., A Short introduction to Social Research, Vistaar Publication, New Delhi; 2006
- Neuman, W.L., Social Research Methods: Qualitative and Quantitative Approaches (6th Ed.), Pearson Education, Inc.2006
- Sarantakos, S., Social Research (2nd Ed.), Palgrave, New York; 1998
- Seltiz, C.H., Research Methods in Social Relations, Holt Rine Hart, and Winston, 1951
- Thakur D., The Research Methodology in Social Sciences, Deep and Deep Publications, New Delhi, 1998
- Young P.V., Scientific Social Survey and Research, Prentice Hall New Jersey, 1956

Semester-IV
Gender Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction to Gender Economics: Concepts and Importance of Gender Economics, Demography of Female Population: Age Structure, Mortality Rates and Sex Ratio, Causes of Declining Sex Ratios and Fertility Rates in LDCs Particularly India; Power of Decision making: Household, Community and State Levels.

Unit-II

Concept and Analysis of Women's Work: Economic Status of Women and its Effect on Work-Participation Rate and Income Level; Supply and Demand for Female Labour in India;

Wage Differential in Labour Market: Determinants of Wage Differentials: Gender, Education, Skill, Productivity, Efficiency, Opportunity; Factors affecting Female Entry in Labour Market.

Unit-III

Social Security of Women: Review of Legislations for Women's Entitlements, Protection of Property Rights; Schemes for Safety Net for Women; Need for Female Labour Unions, Role of Voluntary Organizations, Self-Help Groups in Providing Social Security.

Unit-IV

Gender and Development: Gender and Development Indices: Gender Development Index and Gender Empowerment Measurement; Concept of Gender Budgeting and Budgeting Policies to Reduce Gender Inequality; Gender Debate on Women and Development.

Suggested Readings:

- Agarwal, B. (1994), A Field of One's Own: Gender and Land Rights in South Asia, Cambridge University Press, Cambridge.
- Agnihotri, S.B. (2000). Sex ratio in Indian Population: A Fresh Exploration, Sage Publications, New Delhi.
- Amsden, A.H. (Ed.) (1980), The Economics of Women and Work, Penguin, Harmondsworth.
- Dantwala, M.L., H. Sethi and P. Visaria (1998), Social Change Through Voluntary Action, Sage Publications, New Delhi.
- Desai, N. and M.K. Raj (Eds.) (1979), Women and Security in India, Research Centre for Women Studies, SNDT University, Bombay.
- Bhasin, Kamla, 'Gender Basics, Exploring Masculinity', Delhi: Women Unlimited, 2004.
- Connell, Robert W. Masculinities, Cambridge: Polity Press, 2005.
- Jaysing, India (2004) Ed. Law Relating to Sexual Harassment at the Workplace.
- Universal Law Publishing Company, Delhi.

Semester-IV
Rural Economy

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Rural Economy in India: Nature, Scope and Importance of Rural Development; Determinants of Rural Development: Natural Resources, Human Resources, Capital, Technology; Rural-Urban Linkages: Needs and Importance.

Unit-II

Rural Development Programmes: MGNREGA, National Health Mission (NHM), SHG's and Role of Panchayati Raj Institutions in Rural Development;

Rural Infrastructure: Meaning, Needs and Importance, Challenges and Role in Economic Development.

Unit-III

Poverty and Unemployment in Rural Economy: Concept, Trends, Causes, Challenges and Remedial Actions/Schemes launched by the Government of India;

Health and Nutrition: Status in Rural India; Health Care Programmes in Rural India and their Performances.

Unit-IV

Rural Development Institutions: Role and Functions of Rural Development Institutions; Role of Commercial Banks; Regional Rural Banks; NABARD and Cooperative Credit Societies in Rural Development.

Suggested Readings:

- Datt, R., & Sundharam, K. P. M. (2014). Indian Economy. S. Chand & Company Ltd.
- Desai, V. (2012). Rural Development in India. Himalaya Publishing House.
- Maheshwari, S. R. (2003). Rural Development in India: A Public Policy Approach. Sage Publications.
- Ministry of Rural Development, Government of India. Annual Reports and Policy Documents.
- NABARD. Annual Reports and Publications.
- Singh, K. (2009). Rural Development: Principles, Policies and Management. Sage Publications.

Semester-IV
Urban Economy

Max. Marks: 100

Theory Marks: 70

Time: 3 Hours

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Urban and Urbanization: Concept of Urban and Urbanization; Analytical and Historical Perspective of the Origin and Evolution of Urban Settlements; Urban Transition and the Components of Urban Growth.

Unit-II

Economic Development and Urbanisation: Role of Urbanisation in Economic Development; Role of Economic Development in Redistribution of Population; Salient Features of Urbanisation: The World, India and The National Capital Region of India.

Unit-III

Issues and Problems of Urbanisation: Urban Poverty and Productivity; Urban Unemployment; Urban Land and Housing; Urban Environment; Urban Governance.

Unit-IV

Rural-Urban Relationship: Theory of Urban Bias, Rural-Urban Migration, Terms of Trade and Resource Flow; The Over-Urbanisation Debate; Government Schemes for the Development of Urban Areas.

Suggested Readings:

- Balchin, Paul N, Issac, David and Chen, Jean (2000) Urban Economics: a global perspective, Palgrave, New York.
- HABITAT, 1996, An Urbanizing World- Global Report on Human Settlements 1996, Oxford University Press: New York.
- O'Sullivan, A (2003) Urban Economics (3 rd Edn.), IRWIN, London. (Chapters 1-4).
- Ratnoo, H.S. (2016) Migration of Labour in India: The Squatter Settlements of Delhi Routledge: Abingdon, Oxford.
- Richardson, H.W (1988) New Urban Economics, Dryden Press, Hinsdale.
- United Nations, Department of Economic and Social Affairs, Population Division (2015). World Urbanization Prospects: The 2014 Revision, United Nations New York, 2015.

Semester-IV
Haryana Economy

Max. Marks: 100

Theory Marks: 70

Time: 3 Hours

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Economic Progress of Haryana: Regional Economics: Concept, Scope and Framework; Growth and Development of Haryana since 1966: Trends and Pattern of GSDP; Economic Reforms and Development since 1991.

Unit-II

Agriculture Sector in Haryana: Agriculture Growth and Performance: Trends in Production and Productivity; Green Revolution; Land Reforms and Land use Pattern; Changes in Cropping Pattern; Crop Insurance Schemes; W.T.O. and Haryana Agriculture.

Unit-III

Industry Sector in Haryana: Pattern, Performance, Constraints and Challenges; Small Scale Industries: Role, Problems and Future Prospects; Performance of State Public Sector Undertakings, SEZs in Haryana.

Unit-IV

Planning and State Finance: Plan Performance of the State; Decentralized Planning; Structure of Revenue and Expenditure of the State; State Finance Commissions; Fiscal Management in Haryana: A critical Appraisal.

Suggested Readings:

- D.R. Choudhary (2007), Haryana At Cross Roads: Problems and Prospects National Book Trust, India, New Delhi.
- Department of Economic and Statistical Analysis, Government of Haryana. Economics of Farming in Haryana (various issues). Panchkula.
- Edger M. Hoover: An Introduction to Regional Economics, Alfred A. Knopf, New York.
- Harry W. Richardson: Regional Economics, Weidenfeld and Nicolson, London.
- Laxmi Narayan & Kaswan, Kavita Bhambu (2019). Haryana Economy: Patterns, Potentials and Prospects. White Falcon Publishing.
- Ministry of Finance; Government of Haryana: Economic Survey (various Issues)
- Ministry of Finance; Government of Haryana: Haryana Statistical Abstract (*Various Issues*)
- Planning Commission (2009). Haryana Development Report. Government of India, New Delhi.
- Planning Commission, Govt. of India (2009): Haryana Development Report, Govt. of India, New Delhi.
- S.P. Gupta, Three Decades of Haryana Economy, S P Publications, 144, Shivalik Enclave (NAC) Manimajra – 160101
- Sidhu, Harbans Singh (1991). Agricultural Development and Rural Labour: A Case Study of Punjab and Haryana. Concept Publishing Company: New Delhi
- Singh, M. & Kaur, H. (2004). Economic Development of Haryana. Deep & Deep Publications.
- Sunil Phougat (2004). “WTO Provisions and Haryana Agriculture”, A Thesis Submitted to Maharshi Dayanand University, Rohtak.

Semester-IV
Agricultural Economics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Sustainable Development in Agriculture: Organic Farming: Present Status and Future, Cooperative Farming, Contract Farming and Collective Farming;

Risk and Uncertainty in Agriculture: Nature and Types of Risks and Uncertainties in Agriculture, Public Policies and Farm Level Measures to Reduce Risk and Uncertainties.

Unit-II

Terms of Trade Between Agriculture and Industry: Meaning, Impact of Change in Terms of Trade in Favor of and against Agriculture; Terms of Trade between Agriculture and Industry in India since Independence;

Agricultural Marketing: Need for an Efficient System of Agricultural Marketing; Efficiency of Agricultural Marketing System in India; Measures to Improve the Efficiency of Agricultural Marketing in India.

Unit-III

Economics of Agriculture Production: The Production Function; Factor-Product Relationship; Factor-Factor Relationship; Product- Product Relationship, Role of Farm Size and Structure in Equilibrium, Productivity and Return to Scale;

Model of Production Debate: Private v/s Public Investment in Agriculture; Trends in Public and Private Investment in Indian Agriculture.

Unit-IV

Food Security: Concept, Threat, Indicators and Mechanism to Food Security; Food Assistance Programmes;

Agriculture and International Trade: Main Features of International Trade in Agricultural Commodities; Issues in Liberalization of Domestic and International Trade in Agriculture; World Trade Organization and Indian Agriculture.

Suggested Readings:

- Acharya, S.S. & Agarwal N.L., Agricultural Prices - analysis and policy, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- Basu, K. Agrarian Structure and Economic Under Development (Harwood Academic, London 1980).
- Donner, Peter: Land Reforms and Economic Development, New Delhi.
- Heady, E.O. Economics of Agricultural Production and Resources Use (Prentice Hall India Ltd. New Delhi - 1964).
- Mellor, J. W. The Economics of Agricultural Development (Vora and Co. Bombay, 1966).
- R.N. Soni (2005): Leading Issues in Agricultural Economics, Vishal Publishing House
- Sadhu, AN. and A Singh, Agricultural Problems in India (Himalaya Publishing House, Bombay).
- South-worth, H.M. and B.F. Johnston (ed.) Agricultural Development and Economic Growth (Cornell University Press, London, 1974).
- Sunil Phougat (2004). "WTO Provisions and Haryana Agriculture", A Thesis Submitted to Maharshi Dayanand University, Rohtak.

Semester-IV
Industrial Economics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Industrial Sector in India: Evolution and Paradigm Shift; Recent Trends in Indian Industrial Growth; National Manufacturing Policy 2011; MNCs: Role and Functions;

Growth of Firms: Vertical Integration, Diversification; Concepts of Mergers and Acquisitions.

Unit-II

Industrial Finance: Sources of Short Term and Long Term Finance; Industrial Financial Institutions: Role and Functioning in India; Corporate Securities; Ownership and Creditorship Securities.

Unit-III

Industrial Growth and Policy Measures in India: Regional Industrial Growth in India; Industrial Economic Concentration and Remedial Measures; Development of Cottage and Small-Scale Industries; MRTP and Competition Act, 2002; Recent Policy Measures for Industrial Development.

Unit-IV

Industrial Legislation and Labor Relations in India: New Labour Codes, 2020; Industrial Relations: Worker's Participation in Management and Collective Bargaining; Exit Policy; Industrial Disputes and its Settlement; Tripartism; Social Security and Safety Nets for Industrial Labour in India.

Suggested Readings:

- Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
- Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd. New Delhi.
- Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), Industrial Economy in India (3rd 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).
- Hay, D. and D.J. Moris (1979), Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
- Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahbad.
- Reserve Bank of India, Report on Currency and Finance (Annual).

Semester-IV
Welfare Economics

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction: Scope and Purpose of Welfare Economics; Fundamental Theorems of Welfare economics; Bentham Approach to Aggregate Welfare; Assumption of Uniform Income- Utility Function of Individuals.

Unit-II

Equilibrium: Types of Equilibrium- Partial and General Equilibrium Analysis, General Equilibrium of Exchange and Consumption, General Equilibrium and Market Efficiency, Walrasian and Marshallian approach to Partial Equilibrium; Existence, Stability and Uniqueness of the Partial Equilibrium.

Unit-III

Social Welfare Function: Grand Utility Possibility Frontier and Point of Constrained Bliss; Samuelson's Utility Possibility Curve and Bergson's Social Welfare Function; Arrow Impossibility Theorem; Theory of Second Best.

Unit-IV

Efficiency Criteria: Pareto Optimality Criterion and Efficiency Conditions; Compensation Criteria: Contribution of Kaldor and Hicks; Scitovsky Double Criterion.

Suggested Readings:

- Boadway, R.W. and Neil, B. (1984), Welfare Economics, Basil Blackwell, Oxford.
- Little, I.M.D. (1958), A critique of Welfare Economics, Oxford University Press.
- Scitovsky, T. (1958), Welfare and Competition, GOERGE ALLEN AND UNWIN LTD.
- Sen, A. (1982), Choice, Welfare and Measurement, Basil Blackwell.
- Johansson (1991), An Introduction to Modern Welfare Economics, Cambridge University Press
- Baumol, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
- Pigou, A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
- Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
- Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers, Vol. 1.

Semester-IV
Econometrics-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Dummy Variable: Nature of Dummy Variable, Caution in the Use of Dummy Variables; Testing Structural Stability of Regression Models, Comparing Two Regressions, Use of Dummy Variables in Seasonal Analysis and Interaction Effects; Regression with Dummy Dependent Variables: The LPM, Logit and Probit Models.

Unit-II

Methods of Estimating Simultaneous Equation System: Indirect Least Squares (ILS), 2SLS and 3SLS; Methods of Instrumental Variables (IV).

Unit-III

Dynamic Econometric Models: Introduction and Nature of Distributed Lag (DL) & Auto Regressive (AR) Model; Koyck Approach for Estimation of DL & AR Models; Rationalization of Koyck Approach by Adaptive Expectation and Partial Adjustment Hypothesis.

Unit-IV

Time Series Analysis: Stationarity and Test of Stationary, Granger causality, Unit Roots, Dicky Fuller Test, Co-Integration, Random Walk Model; Forecasting: ARIMA and VAR Models, Box Jenkins Methodology, Vector Auto Regression (VAR).

Suggested Readings:

- Frances, P. H. (1998), Time Series Models for Business and Economic Forecasting, Cambridge University Press, Cambridge.
- Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
- Intrilligator, M.D. (1978), Econometrics Techniques and Applications, Prentice Hall, New Jersey.
- Kmenta, J. (1997), Elements of Econometrics, University of Michigan Press, New York.
- Koutsoyiannis, A. (1997), Theory of Econometrics (2nd Edition), The Macmillan Press Ltd., London. - Johnston, J. (1991), Econometric Methods, McGraw Hill Book Company, London.
- Krishna K.L. (1997), Econometrics Application in India, Oxford University Press, New Delhi.
- Maddala, G.S. (1993), Econometrics Methods and Applications, (2 Vol.), Alder shot, U.K.
- Pindyck, R.S. and D.L. Rubinfeld (1976), Econometric Models and Economic Forecasts, McGraw Hill, Tokyo.

Semester-IV
Financial Institutions and Markets-II

Max. Marks: 100

Time: 3 Hours

Theory Marks: 70

Internal Marks: 30

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Financial Services: Meaning, Scope and Feature of Financial Services; Development Banks: Role and Functions; Investment and Merchant Banking: Introduction, Functions, Types; Changing Scenario of Investment Banking; Functions and Types of Mutual Funds.

Unit-II

Money Market: Concept, Feature and Importance of Money Market; Instrument of Money Market: Commercial Bills, Treasury Bills, Call and Short Notice Money Market, Certificate of Deposits, Commercial Paper, Repurchase Agreement, Interbank Participation Certificate.

Unit-III

Capital Market: Concept, Features and Role Capital Market; Primary Market: Feature and Role of Primary Market, Instruments of Primary Market; Secondary Market: Feature and Role of Secondary Market, Growth of Stock Exchange in India, Major Stock Exchanges in India.

Unit-IV

Regulatory Framework of Financial Institutions in India: Role, Main Features and Functions of Securities and Exchange Board of India (SEBI); Pension Fund Regulatory and Development Authority (PFRDA); Insurance Regulatory and Development Authority (IRDA); Reserve Bank of India (RBI).

Suggested Readings:

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Market and Management, McGraw Hill, New York.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.
- Hanson, J.A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty first Century, Oxford University Press, New Delhi.
- Karker, P.T. and S.A. Zenios (2000) (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge.

Semester-IV
Entrepreneurship Development

Max.Marks:50
Time: 3 Hours

Theory Marks: 35
Internal Marks: 15

Note: There shall be nine questions in all. The first question is compulsory and contains seven short answer type questions of equal marks. The students are required to attempt one question from each unit. All questions carry equal marks.

Unit-I

Introduction to Entrepreneurship: Concept of Entrepreneur and Entrepreneurship; Objectives and Phases of Entrepreneurship Development; Role of Entrepreneurship in Economic Development.

Unit-II

Entrepreneurship Development Programmes: Meaning and Objectives of Entrepreneurship Development Programmes, Entrepreneurship Development Programmes in India; Women Entrepreneurs: Concept, Problems and Remedies.

Unit-III

Entrepreneurship Development Skills: Meaning of Entrepreneurship Skill; Types of Entrepreneurship Skills: Business Management Skills, Teamwork and Leadership Skills, Communication and Listening, Time Management and Organizational Skills, Strategic Thinking and Planning Skills.

Unit-IV

Emerging Trends in Entrepreneurship Development: Digital Entrepreneurship: Meaning, Scope and Opportunities; Social Entrepreneurship: Meaning and Motivation for Social Entrepreneur; Rural Entrepreneurship: Meaning, Potential Opportunities for Rural Entrepreneurship in India.

Suggested Readings:

- Ramachandran, Entrepreneurship Development, Mc Graw Hill.
- Byrd Megginson, Small Business Management an Entrepreneur's Guidebook 7th ed, McGraw Hill.
- Fayolle A (2007) Entrepreneurship and new value creation. Cambridge, Cambridge University Press.
- Lowe R & S Mariott (2006) Enterprise: Entrepreneurship & Innovation. Burlington, Butterworth Heinemann.
- Léo-Paul Dana, World Encyclopedia of Entrepreneurship, Edward Elgar.
- Arya Kumar, Entrepreneurship, Pearson, Delhi.
- Poornima MCH, Entrepreneurship Development –Small Business Enterprises, Pearson, Delhi.
- Sangeetha Sharma, Entrepreneurship Development, PHI Learning.
- Kanishka Bedi, Management and Entrepreneurship, Oxford University Press, Delhi.
- Anil Kumar, S., et al., Entrepreneurship Development, New Age International Publishers, New Delhi.
- Khanka, SS, Entrepreneurship Development, S. Chand, New Delhi.
- Peter F. Drucker, Innovation and Entrepreneurship.
- A.Sahay, M. S. Chhikara, New Vistas of Entrepreneurship: Challenges & Opportunities.