B.A. (H) BUSINESS ECONOMICS

NEP SYLLABUS

B.A. (H) BUSINESS ECONOMICS, NEP STRUCTURE

Semester	Course title	Credits	Nature of Paper	Lecture	Tutorial	Practical
I	Microeconomics-1	4	DSC-1	3	1	0
I	Accounting for Managers	4	DSC-2	3	1	0
I	Mathematics for Business Economcs-1	4	DSC-3	3	0	1
II	Macroeconomics-1	4	DSC-4	3	1	0
II	Financial Institutions	4	DSC-5	3	1	0
II	Statistics for Business-1	4	DSC-6	3	0	1
III	Microeconomics-2	4	DSC-7	3	1	0
III	Mathematics for Business Economcs-2	4	DSC-8	3	1	0
III	Corporate Finance	4	DSC-9	3	1	0
III	Income Tax Law and Practice	4	DSE-1	3	1	0
III	Entreprenuership	4	DSE-3	3	1	0
IV	Macroeconomics-2	4	DSC-10	3	1	0
IV	Statistics for Business-2	4	DSC-11	3	0	1
IV	Marketing Management	4	DSC-12	3	1	0
IV	Public Finance	4	DSE-2	3	1	0
IV	Advertising Management	4	DSE-4	3	1	0
IV	International Finance Management	4	DSE-6	3	1	0
V	Basic Econometrics	4	DSC-13	3	0	1
V	Organizational Behavior	4	DSC-14	3	1	0
V	Industrial Economics	4	DSC-15	3	1	0
V	Income Tax Law and Practice	4	DSE-1	3	1	0
V	Entrepreneurship	4	DSE-3	3	1	0
V	Investment and Portfolio Optimization	4	DSE-5	3	1	0
V	Monetary Economics	4	DSE-7	3	1	0
V	International Economics	4	DSE-9	3	1	0
V	Understanding Consumers	4	DSE-11	3	1	0
VI	Operations Research	4	DSC-16	3	0	1
VI	Business Legislations in India	4	DSC-17	3	1	0
VI	Environmental Economics	4	DSC-18	3	1	0
VI	Public Finance	4	DSE-2	3	1	0
VI	Advertising Management	4	DSE-4	3	1	0
VI	International Finance Management	4	DSE-6	3	1	0
VI	Behavioral Economics	4	DSE-8	3	1	0
VI	Indian Economy	4	DSE-10	3	1	0
VI	Research Methodology	4	DSE-12	3	0	1

List of GE papers

I	Principals of Economics	4	GE-1	3	1	0
I	Legal Environment of Business	4	GE-3	3	1	0
I	Quantitative Techniques in Management	4	GE-5	3	1	0
I	Economics of Startups	4	GE-7	3	1	0
I	International Economics	4	GE-9	3	1	0
I	Economic Policy Framework	4	GE-11	3	1	0
II	Introduction to Digital Marketing	4	GE-1	3	1	0
II	Statistics for Business	4	GE-2	3	0	1
III	Principals of Economics	4	GE-1	3	1	0
III	Legal Environment of Business	4	GE-3	3	1	0
III	Quantitative Techniques in Management	4	GE-5	3	1	0
III	Economics of Startups	4	GE-7	3	1	0
IV	Introduction to Digital Marketing	4	GE-2	3	1	0
IV	Statistics for Business	4	GE-4	3	0	1
IV	Introduction to Finance	4	GE-6	3	1	0
IV	Environmental Economics and Climate Change	4	GE-8	3	1	0
V	Principals of Economics	4	GE-1	3	1	0
V	Legal Environment of Business	4	GE-3	3	1	0
V	Quantitative Techniques in Management	4	GE-5	3	1	0
V	Economics of Startups	4	GE-7	3	1	0
V	International Economics	4	GE-9	3	1	0
V	Economic Policy Framework	4	GE-11	3	1	0
VI	Introduction to Digital Marketing	4	GE-2	3	1	0
VI	Statistics for Business	4	GE-4	3	0	1
VI	Introduction to Finance	4	GE-6	3	1	0
VI	Environmental Economics and Climate Change	4	GE-8	3	1	0
VI	Indian Financial System	4	GE-10	3	1	0
VI	Basic Econometrics	4	GE-12	3	0	1

SEMESTER -1

DSC - 1: Microeconomics – I

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Microeconomics-I	4	3	1	0	Class XII Pass	NIL

DSC - 1: Microeconomics – I

Objectives

This is the first course in a group of two that together cover the basic concepts of Microeconomics. This course covers the areas of consumer demand, production, cost and different types of commodity markets. It introduces the concept of economics, market equilibrium, elasticity, and consumer and producer behaviour at the basic level. It is a core foundation paper giving the students a micro aspect of different economic activities.

Learning Outcomes

· To analyse the market behaviour by understanding the basic concepts of microeconomics.

· To provide students with an understanding of the standard theoretical analysis of consumer and producer behaviour.

· To know the applications of theory of production and cost structure

Course Structure

Unit 1: Basic Concepts   **(8 hours)**

Scope and method of microeconomics; Scarcity and Choice; Positive and normative economics; Production possibility frontier, concepts of opportunity cost, rate of growth; Demand, Supply and Market equilibrium; Market Failure: Public goods and externalities; types of externalities – production and consumption externalities, asymmetric information and moral hazard: principal agent problem.

Unit 2: Theory of Consumer Behaviour   **(20 hours)**

Elasticity: Price elasticity of demand, price elasticity of supply, cross elasticity and income elasticity of demand; Preference; utility; budget constraint; Cardinal theory & Ordinal theory: Budget sets and Preferences under different situations; Utility; Indifference curves: Consumer equilibrium; utility maximization; Engels curve, Derivation of demand curve, Income and substitution effects: Hicks and Slutsky equation; inferior, normal and Giffen goods Applications of indifference curves to other economic problems; Revealed preference theory; revealed preference: weak axiom, compensated law of demand; consumer surplus, equivalent variation and compensating variation, WARP, SARP.

Unit 3: Choice under Uncertainty   **(10 hours)**

Choice under uncertainty – Comparative statics, utility function and expected utility, measures of risk, risk aversion and risk preference; intertemporal choice: savings and borrowing; Duality in consumption.

Unit 4: Technology, Production and Cost   **(30 hours)**

Technology; isoquants; production functions with one and more variable inputs; returns to scale; Law of variable proportion, total, average and marginal product, marginal rate of technical substitution, iso-cost line and firm's equilibrium, elasticity of substitution; cost minimization; expansion path, short run and long run costs; various cost curves in the short run and long run and its relation; economies of scale; increasing and decreasing cost industries; envelope curve; economies of scale. Prices as parameters: Firm equilibrium and profit; short and long-run supply function; taxes and subsidies.

References

Essential

1. McConnell et al. (2021). Microeconomics. McGraw-Hill Education.

2. Varian, H.R. (2020). Intermediate Microeconomics: A modern approach. W. W. Norton.

3. Bernheim, B. and Whinston, M. (2009). Microeconomics. Tata McGraw- Hill.

Additional

1. Hall, Robert E. and Lieberman, Marc (2009). Microeconomics - Principles and Applications. South Western Educational Publishing.

2. Snyder, C., Nicholson, W. (2010). Fundamentals of Microeconomics. Cengage Learning.

3. Pindyck, Robert, Rubinfeld, Daniel (2017). Microeconomics (Eighth Edition). Pearson

Teaching - Learning Process

3 Lectures and 1 tutorial each week.

Assignments, Term Paper, Presentations, Project, Classroom discussions

Assessment Method

Total Marks: 100

Practical: 0

Internal Assessment: 25 Marks

End Semester Exam: Duration: 3 Hours & Maximum Marks: 75

Keywords

Demand, Supply, Elasticity, Market failure, Externalities, Consumer Preference, Production, Cost

DSC - 2: Accounting for Managers

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	**T**	**P**		
Accounting for Managers	4	3	1	0	Class XII Pass	NIL

DSC - 2: Accounting for Managers

Course Objectives

The course imparts knowledge of accounting principles particularly in the context of the preparation of financial statements and cost information of a business entity. The course concerns analysis and interpretation of these statements and their applications to managerial decision- making.

Learning Outcomes

· To understand the process of financial, cost and management accounting.

· To make a critical analysis of the financial statements of a business entity.

· To identify the steps for rational managerial decision making with respect to financial and cost aspects of a business.

Course Structure

Unit 1: Financial Accounting (16 hours)

Meaning of Financial Accounting, Functions and Limitations of Financial Accounting, Users of Financial Accounting Information, Basis of Accounting: Cash and Accrual. Principles of Financial Accounting (GAAP), Overview of International Financial Reporting Standards (IFRS) and Ind AS.

Overview of Process of Financial Accounting: Journalizing, Ledger Posting and Preparation of Trial Balance.

Preparation of final Accounts (with adjustments) of a Sole Proprietor: Trading and Profit and Loss Account and Balance Sheet.

Understanding the Financial Statements of a Joint Stock Company: Format of Income Statement and Position Statement as per revised schedule VI of Companies Act, 2013.

Unit 2: Analysis and Interpretation of Financial Statements   (12 hours)

Financial Statements: Meaning and types, importance and limitations of Financial Analysis

Techniques of Analysis: Cash Flow Statement (Indirect Method as per Revised AS 3): Preparation, Utility and Limitations.

Ratio Analysis with emphasis on the purpose and interpretation of the ratios: Liquidity, Turnover, Profitability and Solvency Ratios. Advantages and Limitations of Ratio Analysis.

Unit 3: Cost and Management Accounting   (20 hours)

Cost and Management Accounting: Meaning, Functions, Utility and Limitations, Financial Accounting vs Cost Accounting, Financial Accounting vs Management Accounting, Tools of Management Accounting, Methods of Costing, Techniques of Costing, Basic Cost Concepts, Classification of Costs, Absorption Vs Marginal Costing.

Unit Costing: Preparation of Cost Sheet and computation of profits.

Cost Volume Profit Analysis, Break-even Analysis, Margin of Safety.

Managerial Decisions involving Alternate Choices: fixing the selling price, exploring new markets, make or buy decision, product/ sales mix decision (with and without key factor), shut down or continue.

Unit 4: Planning and Control   (12 hours)

Meaning of Standard Costing, process of determination of Standard Costs.

Meaning of Budget and Budgetary Control, Benefits and Limitations of Budgetary Control, Classification of Budgets, Preparation of Master Budget, Fixed and Flexible Budgets, Difference between Standard and Budgeted Costs.

Variance Analysis: Cost Variances: problems related to Material and Labour Variances.

References:

Essential

1. Arora, M.N. Accounting For Management. Himalaya Publishing House

2. Lal, J. Accounting For Management. Himalaya Publishing House (P) Ltd.

3. Maheshwari, S.N. Accounting for Management. Vikas Publishing House.

4. Sahoo, B.P. Accounting for Managers. Wisdom Publications.

Additional

1. Gupta, R.L. Introductory Corporate Accounting. Sultan Chand & Sons.

2.   Horngren, C.T., Sundem,G.L., Burgstahler, D. Schatzberg, J.O. Introduction to Management Accounting. Pearson.

3. Monga, J.R. Financial Accounting Concepts and Applications. Mayur Paperbacks.

4. Monga, J.R. Basic Corporate Accounting. Mayur Paperback.

5. Rustagi, R.P. Fundamentals of Management Accounting. Taxmann.

6. Singh, S. Management Accounting. PHl Learning

7. Stice, J. & Stice, E.K. Financial Accounting Reporting and Analysis. Cengage Learning

Teaching - Learning Process

3 Lectures and 1 tutorial each week.

Emphasis on interpretation and applications of accounting methods and techniques for taking managerial decisions. Assignments, Term Paper, Presentations, Project, Classroom discussions

Assessment Method

Total Marks: 100

Practical: 0

Internal Assessment: 25

End Semester Exam: Duration: 3 Hours & Maximum Marks: 75

Key Words

Financial Accounting, Final Accounts, Management Accounting, Cost Accounting, Cost Sheet, Cost Volume Profit Analysis, Variance Analysis.

DSC - 3: Mathematics for Business Economics – I

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Mathematics for Business Economics-I	4	3	0	1	Class XII Pass	NIL

DSC - 3: Mathematics for Business Economics - I

Course Objectives

The objective of this course is to provide instruction on basic mathematics that enablesthe study of economic theory and business applications at the undergraduate level. This shall be required for the teaching of the courses on microeconomic theory, macroeconomic theory, statistics, and econometrics set out in this syllabus. This course introduces mathematical techniques that will be new to most students through examples of their application to economic concepts. The economic and business models are a means for illustrating the method of applying mathematical techniques to economic

theory and business applications in general. Mathematics has become the language of modern analytical economics and it quantifies the relationship between economic variables and among economic actors.

Learning Outcomes

· To build the mathematical base necessary for other courses and to understand the basic functional forms used in economic analysis.

· To develop the mathematical knowledge required in business decision-making and to study the mathematics in which economic theories are expressed.

· To make and refute arguments by developing mathematical understanding.

Course Structure

Unit 1: Introduction   **(9 hours)**

Algebra concepts, number systems, inequalities, mathematical logic, proof techniques; sets and set operations; functions and their properties.

Unit 2: Univariate Analysis   **(16 hours)**

Curves and graphs; elementary functions: linear, quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; Continuous functions: characterisations, properties with respect to various operations and applications; Differentiable functions: characterisations, properties with respect to various operations and applications; Second and higher order derivatives: properties and applications.

Geometric properties of functions: convex functions, their characterisations and applications; local and global optima: geometric and calculus-based characterisations, and applications.

Unit 3: Linear Algebra   (12 hours)

Linear Algebra: Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations: properties of their solution sets; determinants: characterization, properties and applications. Eigenvalues and eigenvectors, diagonalization, Spectral Theorem.

Unit 4: Integration   (8 hours)

Integrals: indefinite and definite. Methods of integration. Economic applications.

Readings

Essential

1. Sydsaeter, K., Hammond, P. (2002). Mathematics for Economic Analysis. Pearson Education.

Additional

1. Chiang, Alpha C., and Wainwright, K.(2005). Fundamental Methods of Mathematical Economics. Boston, Mass: McGraw-Hill/Irwin.

2. Hoy, Michael, Livernois John, McKenna Chris, Ray Rees, and Thanasis Stengos. (©2011) Mathematics for Economics. Cambridge, Mass. : MIT Press

3. Lay, David C., Judi J. McDonald, Steven R. Lay.(2022). Linear Algebra and Its Applications. Pearson.

Practical : 30 Hours

Teaching - Learning Process

3 Lectures and 1 practical each week.

Assignments, Tests, Presentations, Classroom discussions.

Spreadsheet Software for logical and other functions. Problem solving.

Assessment Methods

Total Marks: 100

Practical: 25

Internal Assessment: 25 Marks

End Semester Exam: Duration: 3 Hours & Maximum Marks: 50

Key Words

Set theory, Univariate, Limits, Continuity, Optimisation, Calculus, Differentiation, Concavity, Convexity, Optimisation, Spreadsheet

COMMON POOL OF GENERIC ELECTIVE COURSES

Category-IV

GE - 1: Principles of Economics

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Principles of Economics	4	3	1	0	Class XII Pass	NIL

GEC - 1: Principles of Economics

Course Objectives

This course aims to offer basic understanding of the principles of economics. Specifically, this course intends to expose the student to the basic principles and concepts in Microeconomics and in Macroeconomics. In this course the students are introduced to the problem of scarcity and choice, demand and supply, elasticity, basic consumer theory, production and costs, definition, measurement of the macroeconomic variables -- GDP, consumption, savings, investment, money and credit etc.

Learning Outcome:

· To understand the principles of economics of the modern economy.

· To understand the consumer theory, production, and costs etc.

· To understand the basic principles of macroeconomics, national income accounting and determination of GDP.

· To understand the functioning of the money market.

Course Structure

Unit 1: Introduction   **(8 hours)**

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.

Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.

Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.

Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

Unit 2: Consumer Theory   (12 hours)

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Costs   (12 hours)

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.

Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

Unit 4: Introduction to Macroeconomics   (8 hours)

What is macroeconomics? Macroeconomic issues in an economy.

Unit 5: National Income Accounting   (8 hours)

Concepts of GDP Aggregates and National Income; measurement of national income and related aggregates; nominal and real income; GDP and welfare and the limitations of the GDP concept.

Unit 6: Determination of GDP   (8 hours)

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

Unit 7: Money and Credit   (4 hours)

Money in a Modern Economy: Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy

References:

1.   Case, K.E., Fair, R. C., and Oster, S. E. (2017). Principles of Economics (12th Ed.). Pearson.

2.   Dornbusch, R., Fischer, S. and Startz. R. Macroeconomics (11th Edition). McGraw-Hill.

3.   Mankiw, N.G. (2021). Principles of Economics, (9th Edition). Cengage Learning.

Teaching - Learning Process

Assessment Method

Total Marks: 100

Practical: 0

Internal Assessment: 25

End Semester Exam: Duration: 3 Hours & Maximum Marks: 75

Keywords

Principles of Economics, Scarcity, Consumer Theory, Production, Costs, Gross Domestic Product, money and credit.

GE - 3: Legal Environment of Business

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Legal Environment of Business	4	3	1	0	Class XII Pass	NIL

GEC – 3 Legal Environment of Business **Pre requisites**: None

Course Objective(s): The course intends to familiarize the student with the legal environment which govern business for its efficient conduct and to apply them in real life situations. The purpose is to widen their scope of knowledge by appreciating the different branches of law covering some important legislations from Indian Contract Act, Companies Act, LLP Act, Consumer Protection Act, Sale of Goods Act and IT Act including the relevant cases and amendments.

Learning Outcomes:

The students will be able:

· To understand the basic rules and provisions of Contract and Agreements.

· To know the provisions to Formation and functioning of company and LLP.

· To understand the significance and role of law of sale of goods act

· To have in- depth knowledge of Information Technology Act And legal framework of right to Privacy, Data Security and Data Protection.

· Apply the law correctly to different facts and in different contexts

Unit 1: Indian Contract Act   **(16 hours)**

Meaning and Essentials of a Contract; Valid, Void and Voidable Contract; Offer and Acceptance; Consideration; Capacity of Parties; Free Consent; Discharge of Contract and Remedies for Breach of a Contract.

Unit 2: Companies Act   **(16 hours)**

Meaning and Nature of Company; Promotion and Incorporation of a Company; Memorandum of Association; Articles of Association; Misleading Prospectus and remedies available to the parties; Board of Directors and their qualification, duties, powers. Company Meetings and Resolutions.

Unit 3: Sale of Goods Act and Consumer Protection Act   **(16 hours)**

Essentials of a Contract of Sale; Sale and Agreement to Sell, Conditions and Warranties; Transfer of Title by Non-Owners; Doctrine of Caveat Emptor; Rights of Unpaid Seller. **Consumer Protection Act 2009**: Scope and Applicability of the Act. Rights of consumer. Procedure for complaints. Duties and power of Central Consumer Protection Authority.

Unit 4: Limited Liability Partnership Act and IT Act   **(12 hours)**

Meaning and nature of LLP; LLP and Company; LLP Agreement, Partners and Designated Partners, Incorporation of LLP; Partners and their Relations, Extent and limitation of liability of LLP. **Information Technology Act 2000** Concept and role; Digital signature, Electronic governance, Attribution, Acknowledgement and dispatch of electronic records, Regulation of certifying authorities, Digital signatures certificates, Duties of subscribers, Penalties and adjudication, Appellate Tribunal , Offences.

Essential References:

1. Bansal, V & Arora, A. Corporate Laws. Vikas Publishing, House (P) Ltd. New Delhi.

2. Kuchhal M.C & Vivek K. Business Legislation for Management. VIKAS Publishing House (P) Ltd.

3. Kumar, A. Corporate Laws. International Book House (P) Ltd.

4. Bare Acts relating to the laws.

Additional References

1. Chadha, R,. Chadha, S. Corporate Laws. Mayur Paperbacks. New Delhi.

2. Maheshwari & Maheshwari. Business Law. National Publishing House. New Delhi.

3. Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company. Lucknow.

4. Tulsian, P.C. Business Law. Tata McGraw Hill. New Delhi

Teaching - Learning Process:

3 lectures and One Tutorial class per week. Classroom teaching with interactive discussion of relevant case laws to enable student to have better understanding of legal text and to prepare them to present legal arguments in the cases of real life situations**.**

Assessment Methods:

Total Marks   100

Practical   NA

Internal Assessment   25

End semester exam: Duration:3 Hours   Marks: 75

Key Words: Contract, LLP, Goods, Company, Information technology, Consumer, Digital signature.

GE - 5: Quantitative Techniques in Management

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Quantitative Techniques in Management	4	3	1	0	Class XII Pass	NIL

GEC - 5: Quantitative Techniques in Management

Course Objectives

To apprise students with the construction of mathematical models for managerial decision making. The emphasis is on understanding the concepts, formulation and interpretation of linear programming methods and its application in diverse problems. An introduction to game theory and network analysis forms part of the course.

Learning Outcomes

· Identify and develop operational research models from the verbal description of the real system.

· Understand the mathematical tools that are needed to solve optimization problems.

· Develop critical thinking and use PERT and CPM techniques to improve decision making.

Course Structure

Unit 1: Introduction - Operations Research, Linear Programming   (20 hours)

(i)   Introduction to Operations Research, characteristics, Phases, Methodology, Applications and scope

(ii)   Formulation of Linear Programming problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution); Simplex Method, Special cases, Big-M method and Two-phase method; Duality (emphasis on formulation & economic interpretation); Sensitivity Analysis. (Excel Solver application)

Unit 2: Transportation and Assignment Problem **(16 hours)**

(i)   Transportation Problem: Formulation, Solution by N.W. Corner Rule, Least Cost method, Vogel's Approximation Method (VAM), Modified Distribution Method; Special cases: Multiple Solutions, Maximization case, unbalanced case, prohibited routes.

(ii)   Assignment Problem: Hungarian Method, Special cases: Multiple Solutions, Maximization case, Unbalanced case, Restrictions on assignment.

Unit 3: Network Analysis **(12 hours)**

Basic Concept, Construction of the Network diagram, Critical Path Analysis, float and slack analysis (Total float, free float, independent float), probability consideration in PERT (Interface with Project Management open-source software)

Unit 4: Decision Theory: **(12 hours)**

(i) Decision making environment, Construction of Pay off Table, Opportunity Loss Table, Decision under uncertainty. Decision under Conflict: Game Theory, Two-person Zero-Sum games, Maximin Minimax Principle, Games without Saddle point - Mixed strategy, Dominance Rule.

References:

1.   Vohra, N.D., Quantitative Techniques in Management (5th ed.). Tata McGraw Hill

2.   Swarup, K., Gupta, P.K. and Mohan, Man, Introduction to Management Science Operations Research (19th ed.). Sultan Chand & Sons.

3.   Sharma, J.K., Operations Research: Theory and Applications (6th ed.). Trinity.

4.   Taha, H.A., Operations Research: An Introduction (9th ed.). Pearson.

Teaching - Learning Process

Three lectures and one tutorial class per week. Lectures devoted to teaching the theory of operations research and solving of numerical problems.

Assessment Method

Total Assessment Marks: 100

Practical exam: 0 marks

Internal Assessment: 25 marks

End semester exam   75 marks

Keywords

Linear programming, simplex method, duality, transportation problem, assignment problem, network analysis, PERT, CPM, decision making, game theory

GE - 7: Economics of Startups

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Economics of Startups	4	3	1	0	Class XII Pass	NIL

GEC – 7 Economics of Startups

Pre-requisites: None

Course Objective:

To give the students an overview of startups and its types that would help students to understand basics of starting up new ventures. The challenges they could face while starting up with new business. To enable students to explore, launch entrepreneurial ventures in their own areas of interest.

Learning Outcomes

After successful compilation of the course students will be able to

· Understand the process and working of a startup.

· Identify the different ways in which entrepreneurs manifest in start-ups.

· Know how to create one's own business venture and the various factors that influence successful set-up and sustainable operations.

· Explore the funding and other institutions supporting small business units.

Course Structure

Unit 1: Startup, Generation & Experimentation   (12 hours)

Concept of Startup, Role of digital technologies, Startup ecosystems, the startup movement in India; Generating a value proposition, how valuable are new ideas, Design thinking principles; Experimenting with the prototype, Introduction to lean start-ups, Lean startup principles, Learning and failing fast.

Unit 2: Building the Business Plan (20 hours)

Beginning Considerations: Building a competitive advantage. The strategic management processes. Conducting a feasibility analysis. Forms of Business ownership. Franchising and entrepreneurship. Buying an existing business, marketing and financial considerations: Building a powerful marketing plan. E-commerce and Entrepreneur. Pricing strategies. Creating a successful financial plan. Choosing the right location and layout.

Unit 3: Crafting business models and Lean Start-ups: (16 hours)

Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analysing business models; Business model canvas, Business Pitching.

Unit 4. Institutions Supporting Small Business Enterprises and ethics: (12 hours)

Central level institutions. State level institutions. Other agencies. Industry Associations. Class exercise- discussions on current government schemes supporting entrepreneurship and finding out which scheme will most suit the business plan devised by the student. Importance of Ethical Entrepreneurship, value of ethics to an entrepreneur.

References:

1. Scarborough, N. M., Cornwall, J. R., & Zimmerer, T. (2016). Essentials of entrepreneurship and small business management. Boston. Pearson Publications.
2. Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A., Entrepreneurship, Tata McGraw Hill.
3. Shukla, M.B., Entrepreneurship and Small Business Management. Kitab Mahal Publishers.

Additional Readings

1. Hishrich, R.D. and Peters, M. Entrepreneurship. Irwin Publications.
2. Barringer, B.R. and Ireland, R. Duane. Entrepreneurship: Successfully launching new ventures. (6th Edition) Pearson
3. Kuratko, D.F., and Rao, T.V., Entrepreneurship: A South-Asian Perspective. Cengage Publications.
4. Shankar, R., Entrepreneurship: Theory and Practice. Tata McGraw Hill.
5. Kathleen, R Allen. Launching New Ventures: An Entrepreneurial Approach. Cengage Learning.
6. Fisher, Steve and Duane, Ja-Nae. The Startup Equation - A Visual Guidebook for Building Your Startup. Mc Graw Hill Education India Pvt. Ltd.

Teaching - Learning Process

Three lecture and one tutorial per week. Case study discussion, Class presentation on the assigned topic by students individually or in group, Workshop, Role play.

Class exercise- select an industry that has several competing small firms in your area. Contact these firms and compare their approaches to determining prices, financial plan and location. Based on this analysis build your "own" business plan

Assessment Method

Total Marks – 100

Practical – 0

IA -25

End semester exam - 75

Keywords

Entrepreneurship process, Start-up Idea, Entrepreneurial Venture, Business Incubators

GE - 9: International Economics

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
International Economics	4	3	1	0	Class XII Pass	NIL

GEC – 9 International Economics

Pre-requisites: Basic courses in Microeconomics and Macroeconomics

Course Objectives

This course aims at inculcating basic understanding of fundamentals of international economics. It will enable students to identify basis and gain from international trade with the help of different theoretical models and their applications to real world challenges and its solutions.

Learning Outcomes :

- To understand basic concept and origin of International economics through the prism of classical and new classical trade theories

- To understand different terms of trade and their applicability

- To differentiate between Modern and Classical Trade theories.

- To gain knowledge about the foreign exchange markets and its working

- To learn about global capital market

Course Contents:

Unit 1: Introduction to International Trade [16 hours]

Globalization and its growing importance in the world economy; Impact of globalization; International business contrasted with domestic businesses; Cost and benefit analysis of tariff, Effective rate of protection and welfare arguments of tariff and developing countries. Foreign direct investment (FDI) in world economy: Trends, Direction, and flow of FDI; Theories of FDI; Political ideology and FDI.

Unit 2: International Trade Theory [20 hours]

World Trade: An overview; Theories of international trade – Mercantilism; Absolute advantage theory, Comparative advantage theory, Factory proportion theory and Leontief paradox, Product life cycle theory, New trade theory, National competitive advantage: Porter's diamond. International Business Environment: Economic, Demographic, Cultural

and Political-legal environment.

Unit 3: Balance of Payment (BoP)   [8 hours]

Balance of Payment : Meaning, Components (Current, Capital and Official reserve), Reasons for disequilibrium in BoP, Measures to correct disequilibrium, Understanding India's BoP and comparing it with markets like USA and China.

Unit 4: Foreign Exchange and Global Capital Market   [16 hours]

Exchange Rate Determination: Currency Demand and Supply Curves, Factors Affecting Exchange Rate, Global Capital Market: Introduction, Benefits of global capital market, Growth of global capital market, Global capital market risk, Eurocurrency market, Global bond market, Global equity market, Exchange rate risk, Managing exchange rate risk, Methods of Financing International Trade.

References:

1. Hill, C. (2021). International business: Competing in the global market place (13th Edition). *Strategic Direction*.

2. Krugman, P. R., & Obstfeld, M. (2009). International economics: Theory and policy. Pearson Education.

3. Levi, M.D. (2009). *International Finance* (5th Edition), Taylor and Francis Ltd.

4. Madura, J. (2020). *International financial management*. Cengage Learning.

Teaching-Learning

Three lecture and one tutorial class per week. Classroom teaching with assignment, tests, presentation.

Assessment Method

Total Marks: 100

Practical: 0

IA: 25

End semester exam: 75

Keywords

International Trade, Exchange rate, FDI, Balance of Payment.

GE - 11: Economic Policy Framework

Course Title	Total Credits	Components			Eligibility Criteria	Prerequisite if any
		L	T	P		
Economic Policy Framework	4	3	1	0	Class XII Pass	NIL

GEC-11: Economic Policy Framework

Pre-Requisites: None

Course Objectives

This course will help students to understand the importance of macroeconomic policies. Each section is complemented with contemporary issues in the sphere of these policies.

Learning Outcome:

· To learn the basic concept of macroeconomics

· To understand how different parameters of macroeconomics work under Indian economy.

· To understand how monetary and fiscal policy works.

· To know different exchange rate regimes.

Unit 1: Meaning and objectives of economic policy (16 hours)

Tools and goals (objectives and instruments of policy) Circular flow of income (start with a two sector model and go up to a five sector model); National Income aggregates and the related concepts of national income; input-output table to calculate national income using the income, expenditure and the value added methods.

Unit 2: Fiscal policy (16 hours)

Objectives and meaning; effect of fiscal policy - role of tax policy (T) and government expenditure (G), Aggregate Demand, Meaning of the multiplier. Government expenditure multiplier and balanced budget multiplier Budget –meaning and purpose – example of India's latest Budget (and various heads). Meaning of fiscal, revenue and primary deficits.

Unit 3: Monetary policy (12 hours)

Meaning and objectives; money and credit – credit creation and instruments of credit control; Inflation targeting, Banking in India – structure, recent developments; issues of NPAs and how to resolve it.

Unit 4: Exchange rate policy   (16 hours)

Structure of BOP; meaning of current account deficit and trade deficit; exchange rate definition (real and nominal); fixed vs flexible exchange rate, efficacy of fiscal/monetary policy under fixed and flexible exchange rate , effect of a change in exchange rate on the current account (imports and exports); structure of capital account and role of capital outflows and inflows.

References:

1. Gupta G.S (2016), Macroeconomics - Theory and Applications (4th edition). McGraw Hill,

2. Shapiro, Edward (1982), Macroeconomic Theory, 5th edition

3. Mankiw, Gregory N. (2010), Macroeconomics (7th edition), Worth Publishers.

4. Sikdar, Soumyen (2011), Principles of Macroeconomics, Oxford University Press

5. Krugman, P.R., Obstfeld, M. and Melitz, M. (2015). International Economics: Theory and Policy, Pearson Education Limited.

6. Dua, P. (2020). Monetary Policy Framework in India, Indian Economic Review, 55(1), June 2020, pp. 117-154.

7. http://www.inclusivejournal.in/about.html.

8. Sengupta, R. and Vardhan, H., Non-Performing Assets in Indian Banks, Economic and Political Weekly, 52(12) March 25, 2017, Money, Banking and Finance Special.

9. Economic Survey, India, latest issue

10. Union Budget Statement, India, Latest issue

Additional References:

1. Abel, Andrew, Bernanke, Ben and Croushore, Dean (2011). Macroeconomics (7th edition). Pearson

2. Ghate, C., & Kletzer, K. M. (eds.) (2016). Monetary policy in India: A modern macroeconomic perspective. Springer.

3. Kaul, Vivek (2020) Bad Money: Inside the NPA Mess and how it threatens the Indian Banking System, Harper Collins Publisher India.

4. Chhibber, Ajay and Anees, Salman Soz (2021) India's Financial Sector: A Whodunnit. In Unshackling India. Haper Collins Publishers India.

Teaching - Learning Process

The teaching learning process has internal assessment based on performance of students in class tests, projects including group activity based projects as well as external end semester assessment.

Assessment Method

Total Marks: 100
Practical: 0
Internal Assessment: 25
End Semester Exam: Duration: 3 Hours & Maximum Marks: 75

Keywords

circular flow of income, national income aggregates, fiscal policy, monetary policy, exchange rate policy.

REGISTRAR

SEMESTER II

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Macroeconomics – I DSC-4	4	3	1	0	Class XII	Nil

Learning Objectives

This course aims at inculcating basic understanding of the fundamentals of macroeconomics. It will enable students to identify major macroeconomic issues, their applicability to the real economy.

Learning outcomes

By studying this course, the students will be able to:

- To understand the basic concept of circular flow of income in four sector economies and different approaches to measurement of National Income.

- To introduce basic concepts of the money market including demand and supply aspects of money.

- To apply the closed economy Hicks- Hansen (IS-LM) model for effectiveness of Fiscal and Monetary policies in the short run.

- To identify macroeconomic issues of developing countries in a global macro setting and itsdifference from issues of developed countries.

SYLLABUS OF DSC-4

UNIT–I: Introduction to Macroeconomics and National Income Accounting   (6 Hours)

Origin of macroeconomics; Income, expenditure and the circular flow in three and four sectoral economies; real versus nominal GDP; price indices; measurements of gross domestic product; national income accounting for closed economy and for open economy and National Income Identity; balance of payments accounts and its components.

UNIT – II: Theory of Income Determination   (9 Hours)

An introduction to Classical and Keynesian systems; Simple Keynesian Theory of Income Determination, Consumption function – MPC and APC, changes in equilibrium, Paradox of Thrift and Investment multiplier.

UNIT – III: Money, Interest and Monetary Policy   (12 Hours) Meaning and nature of money, Primary and secondary functions of money; Quantity Theory ofMoney–Cambridge version, Classical theory of interest rate, Loanable fund Theory and KeynesianTheory of Liquidity Preference and interest rate, Liquidity Trap; Credit Creation and Money Multiplier Determination of money supply and demand; credit creation; money multiplier, monetary base; tools of monetary policy

UNIT – IV:IS-LM Analysis and Aggregate Demand (12 Hours) Goods market and money market, graphical derivations of the Hicks-Henson model (IS and LM functions); Properties of IS- LM curves, factors affecting the position and slope of IS-LM curves,determination of equilibrium income and interest rates; Studying the impact of fiscal and monetarypolicies using IS-LM framework;Macro policy in a global setting and developing countries

Unit V: Inflation   (6 Hours)

Inflation: meaning; demand and supply side factors; natural rate theory; monetary policy-output and inflation (monetarist view); Phillips curve: short run and long run.

Essential/recommended readings

1. Abel Andrew B., Bernanke Ben and Croushore Dean (2011). Macroeconomics (7th edition). Pearson

2. Schiller Bradley R. and Gebhardt Karen (2019) Macro economy Today (14th edition), McGrawHill

3. Froyen Richard T. (2013). Macroeconomics: Theories and Policies (10th ed.), Pearson.

4. Blanchard O. (2017). Macroeconomics (7th edition). Pearson

5. Dornbusch R., FischerS., and Startz R. Macroeconomics (11th edition). McGraw-Hill

6. Colander David C. (2017) Macroeconomics (9th edition), McGraw Hill

Suggested readings

1. Gordwin, Harris, Nelson, Roach and Torris (2017) Macroeconomics in context (2nd edition), Routledge Taylor and Francis Pub Indian Edition

2. Government of India (GOI) (Latest Year), Economic Survey, Ministry of Finance New Delhi.

3.   Government of India (GOI) (Latest Year), Handbook of Indian Economy, RBI Publication New Delhi.

4.   Mankiw N. Gregory,Macroeconomics, Worth Publishers.

5. Chugh, S. (2015) Modern Macroeconomics, MIT Press.

6. D'Souza, E, Macroeconomics, Pearson Education

Note: Examination scheme and mode shall be as prescribed by the ExaminationBranch, University of Delhi, from time to time.

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical / Practice		
Financial Institutions and Markets DSC-5	4	3	1	0	Class XII	Nil

Learning Objectives

This course provides an understanding of the existing financial institutions and markets in the Indian financial system. Students will be equipped with the knowledge of primary and secondary segments of the equity, money, and debt markets.

Learning outcomes

By studying this course, the students will able to:

- To understand the role of banking and non-banking financial institutions in India.

- To learn the methods for companies to raise funds in the primary market

- To use the methodology to create stock price indices in India.

- To analyze the process of issuance, trading, and settlement in equity, debt and money market instruments.

SYLLABUS OF DSC- 2

UNIT – I:Financial Institutions in India   (9 Hours)
- Overview of Formal Financial System: Financial Institutions, Financial Markets, Financial Instruments, Financial Services, Role of Financial System in Economic Development.
- Banking and Non-Banking Institutions: Scheduled Commercial Banks in India, Risk Management Process in Banks, Non-Performing Assets, Tools to Manage Non-Performing Assets, Payment Banks.
- Credit Rating Agencies: Meaning, Methodology and Agencies in India.
- Housing Finance: Housing Finance Companies in India, Repricing of Loan, Floating vs. Fixed Rate, The Rest Method, Problems in Housing Finance.
- NBFCs in India: Objectives, Functions, Types, Difference between NBFCs and Banks, Role of NBFCs in Indian Economy.

- Regulatory Institutions: Reserve Bank of India (RBI), Securities Exchange Board of India (SEBI)

UNIT – II:Primary Market for Corporate Securities in India   (15 Hours)
- Financial Markets: Role and Importance of Financial Markets, Types of Financial Markets-Equity Market, Debt market, Money market, Forex Market.
- Procedure of an IPO: Entry Norms for IPOs -Profitability Route, QIB Route, Appraisal Route; Intermediaries to an Issue, Pricing Methods-Fixed Price Process, Book Building Mechanism (Book Building Process, Bidding Process, Reverse Book Building, Limitations), Green Shoe option.
- Methods of Raising Funds: Venture Capital, Private Equity, Public Issues- IPO, FPO, offer for sale; Rights Issue, Private Placement -Preferential Issue, Qualified Institutional Placements, Disinvestment of PSU- Objectives, Sell-off methods.
- Raising of Funds from International Markets-ADRs, GDRs, FCCB and Euro Issues, Masala Bonds.
- Listing and Delisting of Corporate Stocks in Indian Stock markets.

UNIT – III:Secondary Market in India   (12 Hours)
- Overview of Secondary Market: Functions of Secondary Market, Demutualization of Stock Exchange, Bulls and Bears in Stock Markets, Volatility and Circuit Breakers in stock Market, Stock exchanges in India; International stock exchanges, Capital Market Scams.
- Market Mechanism: Financial Instruments-Equity Shares, Debentures & Bonds, Derivatives. Types of Brokers, Depository Process in India.
- Trading, Clearing and Settlement of securities: Types of orders, Contract Note, Clearing Corporations (ICCL, NSCCL), Depositories (NSDL, CDSL), Settlement Mechanism.
- Risk Management: Margin Requirement and Capital requirement of a Broker, MTM and VaR Margins, Margin Trading and Margin Adjustments.

- Indian Stock Indices: Major Indices in India (Sensex and Nifty), Market Capitalization (free float, full float methodology), Calculation Methodology (Price weighted, Equal weighted, Fundamental weighted, Market Capitalisation weighted Index), Classification of Securities to be included in the Index, Impact of corporate actions (Rights, Bonus, and Stock split) on security prices and indices.

UNIT – IV: Money Markets & Debt Market in India   (9 Hours)
- Money Market: Characteristics, Functions and Benefits of Efficient Money Market, Participants in money markets, Money Market Instruments- Auctioned Treasury Bills (Features, Types, and Issuance/Sale by Auction), Commercial Paper (Guidelines and Process for Issuance), Commercial Bills (Features and Types), Certificate of Deposits (Guidelines and Process for Issuance), Call/Notice Money (Reason of volatility and Process of Issuance) Repo, Reverse Repo.
- Long Term Debt Market: Participants and Instruments in Debt market, Private Corporate Debt Market-Issue and listing of Debt Securities; Govt Securities Market-Issuers, Investors and Types; Govt Dated Securities- Issuance, Trading and Settlement. RBI Direct Portal for retail investors for Government Securities

Notes:
1. The relevant rules, regulations and guidelines of the RBI, the SEBI and other regulators for all of the above topics should be covered.

Essential/recommended readings

1. Khan M. Y. Indian Financial System. Tata McGraw Hill.

2. Kannan, R., Shanmugam, K.R., &Bhaduri, S. Non-Banking Financial Companies-Role in India's Development. Springer.

3. Pathak, B. Indian Financial System. Pearson.

4. Eakins, Stanley G. Finance: Investments, Institutions and Management. Addison-wesley Publications.

5. National Stock Exchange of India (2003), "Indian Securities Market: A Review", NSE, Mumbai.

6. RBI Website- https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12179&Mode=0

7. NSE website: https://www.nseindia.com/resources/publications-indian-securities-ismr

Suggested readings

1. Desai, V. Indian Financial System and Development. Himalaya Publishing House.

2. Gordan, E. Natarajan, K. Indian Financial System. Himalaya Publishing House.

3. Madura, J. Financial Markets and Institutions. Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the ExaminationBranch, University of Delhi, from time to time.

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/ Practice		
Statistics for Business Economics - I DSC-6	4	3	0	1	Class XII	Nil

Learning Objectives

This course aims to introduce different kinds of data, its visual representation, and descriptive measures to analyse and describe times series data along with a theory and practice of indices.

Learning outcomes

By studying this course, students will be able to:

- To organize, manage, present data to gain proficiency in using statistical software for data analysis.

- To prepare a technical report/statistical analysis and interpret results to enhance the ability for broader implication of application in the statistical field.

- To conduct the survey in proper way to collect data on specific economic problem and to grasp different variety of probability/nonprobability sampling methods for selecting a sample from a population.

- To make intelligent judgments and informed decisions in the presence of uncertainty and variation.

 SYLLABUS OF DSC-3

UNIT – I Descriptive Statistics   (12 Hours)

Sources of data, census and sample, methods of collection, types of data. Graphical representation – Simple Charts, Box Plot, Histogram; Measures of central tendency, dispersion, skewnessand . Moments.

UNIT – II Probability and distribution   (15 Hours)

Sample space, event and probability. Types of events: joint, conditional and independence. Theories of probability - Classical Theory of Probability; Relative Frequency Theory of Probability; Subjective Theory of Probability and Axiomatic Theory of Probability, Random variable - Discrete and continuous, mass and density functions, cumulative distributions and properties. Joint distributions, marginal and conditional distributions. Bayes Theorem; Mathematical expectation and variance.

Theoretical Discrete and Continuous Probability Distributions – Binomial, Poisson and Normal distributions

UNIT – III Time Series   (6 Hours)

Components. Measurement of trend: linear, exponential and growth. Change in origin and scale. Measurement of seasonal fluctuations.

UNIT – IV Index Numbers   (6 Hours)

Types of index number systems and their relations. Fixed and chain-base. Tests of adequacy. Base shifting, splicing and deflating. Consumer price index, GDP deflator and Stock Prices indices – BSE Sensex and Nifty Fifty.

UNIT – V Correlation and Regression (6 Hours)

Covariance & Correlation – Bivariate Analysis: Cross-tabulations and Scatter Plot; Rank Correlation and Pearson's Correlation; Impact of origin shift and change in scale of Correlation; Linear Regression – Simple and Multiple.

Practical component (30 hours)- Laboratory work using spreadsheet software. Projects using primary or secondary data.

Assessment Method

Total Marks: 100

Practical: 25

Internal Assessment: 25

End Semester Exam: 3 Hours; Maximum Marks: 50

Essential/recommended readings

1. Devore, Jay L., (2012). Probability and Statistics for Engineering and the sciences. 8th Edition, Cengage Learning.

Suggested readings

1. Miller, Irwin and Marylees Miller. John E. Freund's Mathematical Statistics with Applications, Eighth Edition, Pearson Education.

2.   Nagar, A.L., and R.K. Das. Basic Statistics, Second Edition, Oxford University Press

3.   Gupta, S.C., Fundamentals of Mathematical Statistics, Himalaya Publishing House

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

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COMMON POOL OF GENERIC ELECTIVES (GE) COURSES OFFERED BY THE DEPARTMENTS

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GENERIC ELECTIVES (GE-1): INTRODUCTION TO DIGITAL MARKETING

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Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Introduction to Digital Marketing GEC-2	4	3	1	0	Class XII	Nil

Learning Objectives

To acquaint the students with the tools and techniques used by the digital marketers for driving the marketing decisions to attain marketing objectives and understand its integration with traditional marketing.

Learning outcomes

By studying this course, students will be able to:

- To understand the concept of digital marketing and its integration with traditional marketing.
- To understand customer value journey in digital context and behaviour of online consumers.
- To learn email, content and social media marketing and apply the learnings to create digital media campaigns.
- To examine various tactics for enhancing a website's position and ranking with search engines and search advertising.

SYLLABUS OF GE-1

UNIT – I: Fundamentals of Marketing (6 Hours) Importance of marketing; Core marketing

Concepts; Company Orientations; Concept of Segmentation, Targeting-Positioning; 7 P's Framework; Product Life cycle; Pricing strategies, Typesof distribution channels; Promotion Mix.

UNIT – II:Marketing in the Digital World   (9 Hours)

Digital marketing: Concept, Features, Difference between traditional and digital marketing, Moving from traditional to digital Marketing; Digital Marketing Channels: Intent Based- SEO, Search Advertising; Brand Based- Display Advertising; Community Based-SMM; Others- Affiliate, Email, Content, Mobile; Customer Value Journey: 5As Framework; The Ozone O_3 Concept Key; Traits of online consumer

UNIT – III: Content, Email and Social Media Marketing (15 Hours) Content Marketing: Developing a content marketing strategy; Email Marketing: Types of Emails inemail marketing, Email Marketing best practices; Social Media Marketing: Building Successful SocialMedia strategy; Social Media Marketing Channels; Facebook, LinkedIn, YouTube (Concepts andstrategies)

UNIT – IV: Search Marketing   (15 Hours)

Detailed contentsIntroduction of SEM: Working of Search Engine; SERP Positioning; Search Engine Optimization: Overview of SEO Process; Goal Setting-Types On-Page Optimization: Keyword Research, SEO Process -Site Structure, Content, Technical Mechanics, Headings, Image & Alt text, Social Sharing, Sitemaps, Technical Aspects-Compatibility, Structured Data Markup.
Off Page Optimization: Link Formats, Link Building, Content Marketing, Social Sharing; Black and White Hat Techniques

Search Advertising: Overview of PPC Process; Benefits of Paid Search; Basis of Ranking; Goal Setting- Objectives; Account Setting-Creation of Google Ads, Campaign architecture, Campaign setup, Targeting, Bid Strategy, Delivery, Ad Scheduling, Ad Rotation, Keyword Selection; Ad Copy composition, Ad Extension
Overview of Display Advertising: Working of Display Advertising; Benefits and challenges.

Essential/recommended readings

1. Dodson, I. (2016). The art of digital marketing: the definitive guide to creating strategic, targeted, and measurable online campaigns. John Wiley & Sons.

2. Kartajaya, H., Kotler, P., & Setiawan, I. (2016). Marketing 4.0: moving from traditional to digital. John Wiley & Sons.

3. Ryan, Damien. Understanding Digital Marketing - Marketing Strategies for Engaging the Digital Generation. Kogan Page Limited.

Suggested readings

1. Kotler, P. (2009). Marketing management: A south asian perspective. Pearson Education, India.

2. Maity, Moutusy. Internet Marketing: A practical approach in the Indian Context. Oxford Publishing.

3. Gupta, Seema. Digital Marketing. McGraw Hill

4.   Ultimate guide to digital Marketing. Digital Marketer

Note: Examination scheme and mode shall be as prescribed by the ExaminationBranch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-2): STATISTICS FOR BUSINESS

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical / Practice		
Statistics for Business GEC-4	4	3	0	1	Class XII	Nil

Learning Objectives

The objective is to enable students develop understanding of data and statistical tools available to describe it which shall facilitate to make evidence-based decisions using inferential statistics that are based on well-reasoned statistical arguments.

Learning outcomes

By studying this course, students will be able to:

- To learn tools and concepts of statistical analysis and interpretation.
- To comprehend fundamentals of probability theory.
- To develop skills in statistical computing, statistical reasoning and inferential methods.
- To comprehend and analyse real data like real indices.

SYLLABUS OF GE-2

UNIT – I Descriptive Statistics and Exploratory Data Analysis   (9 Hours)

- Types of Variables (Quantitative, Qualitative, discrete, continuous), Scales of Data Measurement (nominal, ordinal, Interval & Ratio), Variable-; Primary & secondary Data.
- Frequency distributions, Relative Frequency, Cumulative Distributions, Percentiles, Quartiles; Graphical representation of data- bar charts, pie, histograms, box plots.
- Measures of central tendency: Mean, median, mode, Geometric Mean, Harmonic Mean, Weighted Mean & their properties. Selection of a measure of central tendency.
- Measures of Dispersion: Range, inter-quartile range, quartile deviation, mean deviation, standard deviation, variance, coefficient of variance, properties of standard deviation. Moments.
- Skewness and Kurtosis: Meaning, measures- Karl Pearson, Bowley, Kelly's, Kurtosis-meaning and measurement of Kurtosis

UNIT – II Probability   (12 Hours)

- Axioms of probability; Review of counting rules, experiments, sample space, simple and

complex events; Addition and multiplication rules; Concepts of Mutually exclusive events, independent events; Concepts of Joint, marginal and conditional probability; Bayes Theorem.

- Concept of Discrete and continuous Random Variables; Expected value and variance; Theoretical Discrete and Continuous Probability Distributions – Binomial, Poisson and Normal distributions

UNIT – III Sampling, Estimation and Hypotheses Testing   (12 Hours)

- Population versus Sample; Sample Statistics versus population parameters; Definition and Statistical properties of a Random Sample; Point and Interval Estimation and Small Sample Properties of Estimators (unbiasedness, efficiency); Central Limit Theorem. (Interval estimation for mean for large samples)
- Basic concepts of Hypotheses Testing: Formulation of Null and Alternate Hypotheses; One- tailed and two-tailed Tests about population Mean; Concepts of Type I and Type II errors. (Hypothesis testing for mean and difference between mean for large samples only)

UNIT – IV: Index Numbers   (6 Hours)

- Index Numbers: Use and construction of Laspeyres and Paasche index numbers; Fixed and chain base index numbers; Base shifting, splicing and deflating. Construction of real indexes:Consumer Price Index and Stock Market Indices – BSE SENSEX and NSE Nifty.

UNIT – V Correlation and Regression   (6 Hours)

- Covariance & Correlation: Bivariate Analysis: Cross-tabulations and Scatter diagram; Rank Correlation and Pearson's Correlation; Linear Regression – Simple.

Practical component (30 hours)- Laboratory work using relevant software for statistical dataanalysis. Projects using primary or secondary data.

**Practical
component
–yes
Assessment
Method
Total
Marks:
100
Practical: 25
Internal Assessment: 25
End Semester Exam: Duration: 3 Hours & Maximum Marks: 50**

Essential/recommended readings
1. Spiegel, M.R.(2003). Theory & Problems of Statistics, Schaum's outline series, McGraw Hill.

2.   Levin, Richard I. and Rubin, David (1998). Statistics for Management (7th Edition), Pearson.

3.   Gupta, S.C. (2018). Fundamentals of Statistics, Himalaya Publishing House

4.   Spiegel, M. and Stephens, Larry (2017). Statistics (Schaum's Outline Series), Tata-Mcgraw-Hill,New Delhi

Suggested readings

1.   Nagar, A. L. and Das. R. K.. Basic Statistics (2nd Edition), Oxford University Press

2.   Karmel,   P. H. and Polasek, M. (1978). Applied Statistics for Economists (4th edition), Pitman.

3.   Larsen, Richard J. and Marx, Morris L. (2011). An Introduction to Mathematical Statistics and itsApplications. Prentice Hall.

Note: Examination scheme and mode shall be as prescribed by the ExaminationBranch, University of Delhi, from time to time.

SEMESTER III

DISCIPLINE SPECIFIC CORE COURSE – 7 (DSC-7): MICROECONOMICS-II

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical / Practice		
Microeconomics-II (DSC 7)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to provide to the student an understanding of:
- the concepts of a market structure and equilibrium in perfectly and imperfectly competitive market situations.
- the possible equilibria in factor markets
- equilibrium in all commodity and factor markets
- the concept of economic welfare and its properties.

Learning outcomes

By studying this course, the students will be able to:

- Identify different forms of market structure, their resource allocation and welfare implications.

- Express rational agent desires in a game theoretic framework.

- Analyse profit maximising strategies under different oligopoly models.

- Use a social welfare function to evaluate societal outcomes

SYLLABUS OF DSC-7

UNIT–I: Market Structure   (18 hours)

Perfect Competition: Firm equilibrium in the short and long run. Short run supply curve for the firm and the market, long run industry supply; constant, increasing and decreasing cost industry; producer and consumer surplus. Monopoly: Profit Maximisation, multi- plant firm, monopoly power and its measurement, social costs of monopoly, price discrimination. Monopolistic Competition: product differentiation; equilibrium of the firm in the industry- with entry of new firms and with price competition, Comparisons. Oligopoly and Game Theory: Cournot model and reaction curves, Stackelberg's model, Bertrand model, Quantity leadership, Price leadership, Non collusive stable equilibrium,

Simultaneous quantity setting, Collusion, Cartels, Concepts of Game Theory: Dominant strategies and Nash Equilibrium, Mixed strategies, Prisoner's Dilemma.

UNIT – II: Factor Market   (10 hours)

Factor pricing in the case of single and many variable factors, demand for labor in a product market with perfect competition and monopoly, monopsony, bilateral monopoly and role of labour unions. Economic rent and quasi rent.

UNIT – III: General Equilibrium   (9 hours)

Equilibrium and efficiency under pure exchange and production; Edgeworth box; Pareto optimality conditions; market trade; Walras' law; existence of equilibrium and efficiency; Implications of the first and second welfare theorem.

UNIT – IV: Welfare   (8 hours)

Social Welfare Function; welfare maximization, Fair allocation, Envy and equity, Arrow's Impossibility Theorem

Essential/recommended readings

1. Varian, H. R. (2020). Intermediate microeconomics: A modern approach. W. W. Norton.

2. Bernheim, B., Whinston, M. (2009). Microeconomics. Tata McGraw- Hill.

3. Snyder, C., Nicholson, W. (2010). Fundamentals of Microeconomics. Cengage Learning

4. Pindyck, Robert S. & Rubinfeld, Daniel L. (2017). Microeconomics. Pearson

Suggestive readings

1. Dr. Robert E. Hall and Dr. Marc Lieberman. (2009).Microeconomics - Principles and Applications. South Western Educational Publishing.

2. Bergstrom, T., Varian, H. (2014). Workouts in Intermediate Microeconomics. W. W. Norton.

3. Joseph E. Stiglitz and Carl E. Walsh. (2006). Principles of Microeconomics. W. W. Norton & Co.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical / Practice		
Mathematics for Business Economics –II (DSC 8)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to introduce to the student the understanding of

- real multivariate functions and their properties
- the optimisation conditions for real multivariate functions
- differential equations and their applications
- difference equations and applications

Learning outcomes

By studying this course, the students will able to:

·   To be adept in the use of differential and integral calculus to examine the properties of functions used in economics and business

·   To solve numerical problems of multivariable optimization and properties of the solutions.

·   To model business and economic scenarios in mathematical terminology and to appreciate economic models by using formal mathematical methods.

SYLLABUS OF DSC-8

UNIT – I:Multivariable Functions   **(12 hours)**
Geometric representations: graphs and level curves; differentiability: characterisations, properties with respect to various operations and applications; higher order derivatives: properties and applications; the implicit function theorem and application to comparative statics problems; homogeneous and homothetic functions: characterisations and applications

UNIT – II: Multivariable Optimization   **(15 hours)**
Multivariate optimisation: Convex sets; geometric properties of functions: convex functions, their characterisations, properties and applications; further geometric properties of functions:

quasiconvex functions, their characterisations, properties and applications; unconstrained optimisation: geometric characterisations, characterisations

using calculus and applications. Multivariate Optimization with constraints: Constrained optimisation with equality constraints: geometric characterisations, Lagrange characterisation using calculus and applications; properties of value function: envelope theorem and applications.

UNIT – III: Economic Dynamics -1   (9 hours)
First order differential equations, phase diagrams and stability.

UNIT – IV: Economic Dynamics -2   (9 hours)
First order difference equations, equilibrium and stability

Essential/recommended readings
1. Sydsaeter, K., Hammond, P. (2002). Mathematics for economic analysis. Pearson Educational.

Suggestive readings
1. Chiang, Alpha C., and Wainwright Kevin. Fundamental Methods of Mathematical Economics. Boston, Mass: McGraw-Hill/Irwin, 2005

2. Hoy, Michael, Livernois, John, McKenna, Chris, Rees, Ray and StengosThanasis (2011) Mathematics for Economics. Cambridge, Mass. : MIT Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Corporate Finance (DSC 9)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to
- introduce the basic concepts of financial management and its objectives.
- provide an understanding of investment decisions and of working capital.
- introduce and discuss the issues in the cost of capital.
- examine the theories and analysis involved in financing decisions and dividend distribution.

Learning outcomes

By studying this course, students will be able to:

- To learn the role and objectives of financial management in business corporations.

- To acquire skills to analyse corporate behaviour during procurement and development of resources.

- To understand capital structure and discuss the factors that financial managers consider while determining a company's financing strategy

- To critically discuss the theories relating to dividends policies and cost of capital

SYLLABUS OF DSC-9

UNIT – I: Introduction   (6 hours)
Nature and Scope of Financial Management. Traditional and Modern Approach to the concept of financial management. Functions of finance – Finance Decision, Investment Decision, Dividend Decision. Objectives of Financial Management - Profit Maximisation and Wealth Maximisation. Concept of Time Value of Money.

UNIT – II: Investment Decision   (15   hours)
Capital Budgeting - Nature and meaning of capital budgeting; Types of decisions: - Accept-Reject, Replacement, Mutually Exclusive. Estimation of Relevant cash flows. Evaluation techniques - Accounting Rate of Return, Pay Back, Net Present Value, Internal Rate of Return, Profitability Index Method.

Concepts and Definition of working capital. Determining Financing Mix; Permanent and temporary working capital; Determinants of working capital; Computation of Working Capital.

UNIT – III: Cost of Capital   (9 hours)

Concept and Measurement of Cost of Capital: Measurement of specific costs - Cost of debt:- perpetual debt and Redeemable debt; Cost of Preference Share; Cost of Equity Capital – Dividend valuation model and CAPM; Cost of Retained Earnings. Computation of Overall Cost of Capital based on book value weights and market value weights.

UNIT – IV: Financing Decision   (15 hours)

Leverage Analysis - Operating, Financial, and Combined Leverage, Earning Before Interest and Tax (EBIT) – Earning Per Share (EPS) analysis, Indifference point. Capital structures theories - Net income approach; Net operating income approach; Modigliani- Miller (MM) approach. Factors affecting capital Structure.

Dividend Decision: Relevance and irrelevance of dividends. Residual theory of dividends; Modigliani and Miller hypothesis; Walter's model; Gordon's model. Factors affecting Dividend Policy.

Essential/recommended readings

1. Khan, M.Y., & Jain, P.K. Basic Financial Management. Tata McGraw Hill Education Private Limited.

2. Pandey,I.M. Financial Management. Vikas Publishing House Pvt. Ltd. New Delhi

3. Rustagi, R. P. Fundamentals of Financial Management, Taxmann publication(Pvt) Ltd,New Delhi.

Suggestive readings

1. Van Horne, J.C. Financial Management and Policy. Prentice Hall of India.

2. Levy, H. and Sarnat, M. Principles of Financial Management. Prentice Hall.

3. Brealey, Richard, A., & Myers, Stewart, C. Principles of Corporate Finance. Tata McGraw Hill Publishing Company Limited.

4. Chandra, Prasanna. Financial Management-Theory and Practice. Tata McGrawHill.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC ELECTIVE COURSE 1 (DSE-1): INCOME TAX LAW AND PRACTICE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical / Practice		
Income Tax Law and Practice (DSE 1)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at
- Introducing basic definitions in Income Tax Act
- Computing taxable income under the heads Salaries and House Property
- Calculate Profits and Gains of Business or Profession, Capital Gains and Income from other sources
- Understand deductions from gross taxable income and filling of returns.

Learning outcomes

By studying this course, the students will be able to:

- To Understand the Process of determination of taxable income

- To apply the deductions to taxable income as per the latest provisions of Income- tax Act, 1961

- To Acquire the skill of Filling Basic Returns of Income Tax

SYLLABUS OF DSE-1

Unit 1: Introductory Concepts (3 hours)

Permanent Account Number (PAN), Assessment Year, Previous Year, Person, Assessee, Gross Total Income, Total income and its computation, Tax Rates, Residential status; Relationship between Residential Status and Incidence of Tax. Incomes Exempted under section 10.

Unit 2: Computation for "Salaries" and "Income from House Property" (15 hours)

Income under the head "Salaries": Meaning of Salary, basis of charge, Allowances, Perquisites, permissible deductions from salary income, Deduction under Section 80 C.

Income under the head "Income from House Property": Basis of charge, income from let out house property, income from self-occupied property.

Unit 3: Computation for 'Profits and Gains of Business or Profession', 'Capital Gains' and 'Income from other sources' (15 hours)

Profits and gains of business or profession: Basis of charge, important rules regarding assessment of PGBP, computation of Profits from Business or Profession, deductions expressly allowed, expenses expressly disallowed.

Capital gains: basis of charge, meaning of capital asset, cost of acquisition, improvement and indexation, exemptions for capital gains arising from transfer of Capital Assets, calculation of tax on short-term and long-term capital gains.

Income from other sources: basis of charge, dividend, winnings from lotteries, crossword puzzles, etc., interest on securities, advance money received for transfer of a capital asset, permissible deductions.

Unit 4: Computation of Total Income and Tax Liability (12 hours)

Computation of total income; Deductions from gross total income under section 80 C to 80 U; Rebates and reliefs; Set-off and carry forward of losses (Concept only), Concept of advance payment of Tax and Deduction of Tax at Source. Computation of Taxable Income and liability of Tax. e-Filing of Returns: ITR-1 (SAHAJ) and ITR-2

Essential/recommended readings

1. Ahuja, G. and Gupta, R. Simplified Approach to Income Tax. Flair Publications (P) Ltd.

2. Singhania, V.K. and Singhania, M. Students Guide to Income Tax. Taxmann Publications (P) Ltd.

Software to be used for teaching are:

1. 'Excel Utility' available at incometaxindiaefiling.gov.in

2. Vinod Kumar Singhania, e-filing of Income Tax Returns and Computation of Tax Taxmann Publication (P) Ltd, New Delhi. (Latest version)

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC ELECTIVE COURSE 2 (DSE-3): ENTREPRENEURSHIP

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Entrepreneurship (DSE 3)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:
- To introduce the concept of entrepreneurship and its role in the economy
- To launch an Entrepreneurial Venture and writing a business plan
- To identify and explore legal and financial requirements of a business
- To understand the role and creativity in sustainable Business

Learning outcomes

By studying this course, the students will be able to:

· To develop critical thinking, problem solving skills and entrepreneurial mind-set in students.

· To enhance the understanding of the entrepreneurial process from idea generation, to concept development and creation of the venture.

· To enable the understanding of the business models, legal aspects of enterprise and writing a business plan.

· To apprise students with ways to finance and scale up the business.

SYLLABUS OF DSE-2

Unit 1: Introduction to Entrepreneurship   (9 hours)

Concept of Entrepreneurship; Attributes of Entrepreneur; Distinction between entrepreneur and manager; Concept of corporate entrepreneurship/ intrapreneurship; Concept of social entrepreneurship; Role of entrepreneurship for an economy; Understanding business model strategy; Legal forms of enterprise; case study discussion on entrepreneurs, intrapreneurs, business models

Unit 2: Launching Entrepreneurial Venture   (12 hours)

Identification of opportunities and Idea generation and screening methods- Brainstorming, mind-mapping, story-telling, SCAMPER, attribute listing, focus group

interviews, customer feedback; Feasibility studies- Marketing, Financial, Technical, Socio-economic Feasibility; Writing Business Plan

Unit 3: Legal and Financial Aspects   (12 hours)

Legal requirements of business (Basic concept and relevance of patents, copyrights, and trademark); Financing- Start-up phase financing, growth stage financing, Maturity- phase financing; angel investment and venture capital, other forms of external financing; case study discussion on financing a venture

Unit 4: Sustaining and Scaling Up   (12 hours)

Keeping the entrepreneurial spirit alive- Challenges and remedies, Role of creativity and innovation, Barriers to entrepreneurship, Concept of sustainability, Ethical Perspectives; Introducing Shared Innovation into the Business Model; Evolution of CSR from Compliance to Sustainable Entrepreneurship; How to Design CSR Strategies that Optimize Impact for Business and Society

Essential/recommended readings

·1.   Harvard Business Review Entrepreneur's Handbook: Everything You Need to Launch and Grow Your New Business

2.   Hisrich, R. D. International entrepreneurship: starting, developing, and managing a global venture. Sage Publications.

3.   Sharma, S., Starik, M., & Wuebker, R. Sustainability, innovation and entrepreneurship: introduction to the volume.

Additional References:

1.   Blank, S., Andreessen, M., Hoffman, R., & Sahlman, W. A. (2018). HBR's 10 Must Reads on Entrepreneurship and Startups (featuring Bonus Article "Why the Lean Startup Changes Everything" by Steve Blank). Harvard Business Press.

2.   Drucker, P. (2014). Innovation and entrepreneurship. Routledge.

3.   Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A.: Entrepreneurship, Tata McGraw Hill.

4.   Kuratko, D.F., and Rao, T. V., Entrepreneurship: A South-Asian Perspective, Cengage.

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GENERIC ELECTIVES (GE-1): PRINCIPLES OF ECONOMICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Principles of Economics (GEC 1)	4	3	1	0	Class 12	None

Learning Objectives

This course aims

- To offer basic understanding of the basic principles of micro economics like problem of scarcity and choice, demand and supply, elasticity.
- To introduce students with basic consumer theory,
- To introduce students with production and cost concept
- to expose the student to the basic principles and concepts in Macroeconomic variables -- GDP, consumption, savings, investment, money and credit etc.
- To learn measurement of national income and related aggregates; nominal and real income
- To determine actual and potential GDP
- To understand the functioning of money market

Learning outcomes

By studying this course, students will be able to:

- To understand the principles of economics of the modern economy.
- To understand the consumer theory, production, and costs etc.
- To understand the basic principles of macroeconomics, national income accounting and determination of GDP.
- To understand the functioning of the money market.

SYLLABUS OF GEC-1

Unit 1: Introduction (6 hours)

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.

Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.

Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

Unit 2: Consumer Theory   (9 hours)

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Costs   (9 hours)

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.

Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

Unit 4: Introduction to Macroeconomics   (6 hours)

What is macroeconomics? Macroeconomic issues in an economy.

Unit 5: National Income Accounting   (6 hours)

Concepts of GDP Aggregates and National Income; measurement of national income and related aggregates; nominal and real income; GDP and welfare and the limitations of the GDP concept.

Unit 6: Determination of GDP   (6 hours)

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

Unit 7: Money and Credit   (3 hours)

Money in a Modern Economy: Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy

Essential/recommended readings

1.   Case, K.E., Fair, R. C., and Oster, S. E. (2017). Principles of Economics (12th Ed.). Pearson.

2.   Dornbusch, R., Fischer, S. and Startz. R. Macroeconomics (11th Edition). McGraw-Hill.

3.   Mankiw, N.G. (2021). Principles of Economics, (9th Edition). Cengage Learning.

4.   Acemoglu, D., Laibson, D., List J.A. (2016), Economics, Pearson

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Legal Environment of Business (GEC 3)	4	3	1	0	Class 12	None

Learning Objectives

The course intends:
- To familiarize the student with the concept and essentials of Indian Contract act which govern business for its efficient conduct and to apply them in real life situations.
- To explain the meaning, nature and incorporation of a company.
- To make students understand and apply the provisions of Sale of Goods Act and Consumer Protection Act.
- To recognize and articulate legal principles related to Limited Liability Partnership and Information Technology Act.

Learning outcomes

By studying this course, students will be able to:

·   To understand the basic rules and provisions of Contract and Agreements.

·   To know the provisions to Formation and functioning of company and LLP.

·   To understand the significance and role of law of sale of goods act

·   To have in- depth knowledge of Information Technology Act And legal framework of right to Privacy, Data Security and Data Protection.

·   Apply the law correctly to different facts and in different contexts

SYLLABUS OF GEC-3

Unit 1: Indian Contract Act   **(12 hours)**

Meaning and Essentials of a Contract; Valid, Void and Voidable Contract; Offer and Acceptance; Consideration; Capacity of Parties; Free Consent; Discharge of Contract and Remedies for Breach of a Contract.

Unit 2: Companies Act   **(12 hours)**

Meaning and Nature of Company; Promotion and Incorporation of a Company; Memorandum of Association; Articles of Association; Misleading Prospectus and

remedies available to the parties; Board of Directors and their qualification, duties, powers. Company Meetings and Resolutions.

Unit 3: Sale of Goods Act and Consumer Protection Act   (12 hours)

Essentials of a Contract of Sale; Sale and Agreement to Sell, Conditions and Warranties; Transfer of Title by Non-Owners; Doctrine of Caveat Emptor; Rights of Unpaid Seller.**Consumer Protection Act 2009**: Scope and Applicability of the Act. Rights of consumer. Procedure for complaints. Duties and power of Central Consumer Protection Authority.

Unit 4: Limited Liability Partnership Act and IT Act   (9 hours)

Meaning and nature of LLP; LLP and Company; LLP Agreement, Partners and Designated Partners, Incorporation of LLP; Partners and their Relations, Extent and limitation of liability of LLP.

Information Technology Act 2000: Concept and role; Digital signature, Electronic governance, Attribution, Acknowledgement and dispatch of electronic records, Regulation of certifying authorities, Digital signatures certificates, Duties of subscribers, Penalties and adjudication, Appellate Tribunal , Offences.

Essential/recommended readings

1. Bansal, V & Arora, A. Corporate Laws. Vikas Publishing, House (P) Ltd. New Delhi.

2. Kuchhal M.C & Vivek K. Business Legislation for Management. VIKAS Publishing House (P) Ltd.

3. Kumar, A. Corporate Laws. International Book House (P) Ltd.

4. Bare Acts relating to the laws.

Suggestive readings

1. Chadha, R,. Chadha, S. Corporate Laws. Mayur Paperbacks. New Delhi.

2. Maheshwari & Maheshwari. Business Law. National Publishing House. New Delhi.

3. Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company. Lucknow.

4. Tulsian, P.C. Business Law. Tata McGraw Hill. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical / Practice		
Quantitative Techniques in Management (GEC 5)	4	3	1	0	Class 12	None

Learning Objectives

To apprise students:
- To understand the concepts, formulation and interpretation of linear programming methods and its application in diverse problems.
- To formulate and solve Transportation and Assignment problems
- To understand basic concept, construction of the Network diagram and Critical Path Analysis
- To introduce game theory and network analysis forms part of the course.

Learning outcomes

By studying this course, students will be able to:

- Identify and develop operational research models from the verbal description of the real system.
- Understand the mathematical tools that are needed to solve optimization problems.
- Develop critical thinking and use PERT and CPM techniques to improve decision making.

SYLLABUS OF GEC-5

UNIT – I: Introduction - Operations Research, Linear Programming   (15 hours)

(i)   Introduction to Operations Research, characteristics, Phases, Methodology, Applications and scope

(ii)   Formulation of Linear Programming problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution); Simplex Method, Special cases, Big-M method and Two-phase method; Duality (emphasis on formulation & economic interpretation); Sensitivity Analysis. (Excel Solver application)

UNIT – II:Transportation and Assignment Problem   (12 hours)

(i)   Transportation Problem: Formulation, Solution by N.W. Corner Rule, Least Cost method, Vogel's Approximation Method (VAM), Modified Distribution Method; Special cases: Multiple Solutions, Maximization case, unbalanced case, prohibited routes.

(ii)   Assignment Problem: Hungarian Method, Special cases: Multiple Solutions, Maximization case, Unbalanced case, Restrictions on assignment.

UNIT – III: Network Analysis   (9 hours)

Basic Concept, Construction of the Network diagram, Critical Path Analysis, float and slack analysis (Total float, free float, independent float), probability consideration in PERT (Interface with Project Management open-source software)

UNIT – IV: Decision Theory   (9 hours)

Decision making environment, Construction of Pay off Table, Opportunity Loss Table, Decision under uncertainty. Decision under Conflict: Game Theory, Two-person Zero- Sum games, Maximin Minimax Principle, Games without Saddle point - Mixed strategy, Dominance Rule.

Essential/recommended readings

1.   Vohra, N.D., Quantitative Techniques in Management (5th ed.). Tata McGraw Hill

2.   Swarup, K., Gupta, P.K. and Mohan, Man, Introduction to Management Science Operations Research (19th ed.). Sultan Chand & Sons.

3.   Sharma, J.K., Operations Research: Theory and Applications (6th ed.). Trinity.

4.   Taha, H.A., Operations Research: An Introduction (9th ed.). Pearson.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-7): ECONOMICS OF STARTUPS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Economics of Startups (GEC 7)	4	3	1	0	Class 12	None

Learning Objectives

To apprise students:
- To give an overview of startups and its types that would help students to understand basics of starting up new ventures.
- To build and create a successful Business Plan
- To understand various Business models and learn startups
- To familiarize with central and state level institutions supporting small business entreprises.

Learning outcomes

By studying this course, students will be able to:

. · Understand the process and working of a startup.

· Identify the different ways in which entrepreneurs manifest in start-ups.

· Know how to create one's own business venture and the various factors that influence successful set-up and sustainable operations.

· Explore the funding and other institutions supporting small business units.

SYLLABUS OF GEC-7

UNIT – I: Startup, Generation & Experimentation   (9 hours)
Concept of Startup, Role of digital technologies, Startup ecosystems, the startup movement in India; Generating a value proposition, how valuable are new ideas, Design thinking principles; Experimenting with the prototype, Introduction to lean start-ups, Lean startup principles, Learning and failing fast.

UNIT – II: Building the Business Plan   (15   hours)
Beginning Considerations: Building a competitive advantage. The strategic management processes. Conducting a feasibility analysis. Forms of Business ownership. Franchising and entrepreneurship. Buying an existing business, marketing and financial considerations: Building a powerful marketing plan. E-commerce and Entrepreneur.

Pricing strategies. Creating a successful financial plan. Choosing the right location and layout.

UNIT – III: Crafting business models and Lean Start-ups (12 hours)

Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analysing business models; Business model canvas, Business Pitching.

UNIT – IV: Institutions Supporting Small Business Enterprises and Ethics(9 hours)

Central level institutions. State level institutions. Other agencies. Industry Associations. Class exercise- discussions on current government schemes supporting entrepreneurship and finding out which scheme will most suit the business plan devised by the student. Importance of Ethical Entrepreneurship, value of ethics to an entrepreneur.

Essential/recommended readings

1. Scarborough, N. M., Cornwall, J. R., & Zimmerer, T. (2016). Essentials of entrepreneurship and small business management. Boston. Pearson Publications.

2. Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A., Entrepreneurship, Tata McGraw Hill.

3. Shukla, M.B., Entrepreneurship and Small Business Management. Kitab Mahal Publishers.

Suggestive readings

1. Hishrich, R.D. and Peters, M. Entrepreneurship. Irwin Publications.

2. Barringer, B.R. and Ireland, R. Duane. Entrepreneurship: Successfully launching new ventures. (6th Edition) Pearson

3. Kuratko, D.F., and Rao, T.V., Entrepreneurship: A South-Asian Perspective. Cengage Publications.

4. Shankar, R., Entrepreneurship: Theory and Practice. Tata McGraw Hill.

5. Kathleen, R Allen. Launching New Ventures: An Entrepreneurial Approach. Cengage Learning.

6. Fisher, Steve and Duane, Ja-Nae. The Startup Equation - A Visual Guidebook for Building Your Startup. Mc Graw Hill Education India Pvt. Ltd.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

REGISTRAR

SEMESTER IV

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Macroeconomics-II (DSC 10)	4	3	1	0	Class 12	Mathematics at Class 12

Learning Objectives

This course aims at inculcating an understanding:
(i) of macroeconomic outcomes arising from assumptions of individual behaviour
(ii) of equilibrium under different assumptions on aggregate demand and supply.
(iii) of the relation between wages, prices, unemployment under different models
(iv) of an economy that trades with others and how it determines the balance of payments and different types of exchange rates.

Learning outcomes

By studying this course, the students will be able to:

·   Understand basics of consumption function and different hypotheses regarding aggregate consumption behavior.

·   Derive wage setting, price setting relations and labour market equilibrium.

·   Derive aggregate demand and aggregate supply and economy's equilibrium conditions in medium run and understand the interaction between the two.

·   Understand the relationship between inflation, unemployment and output and role of expectation on policy and their effectiveness.

SYLLABUS OF DSC-10

UNIT–I: Microeconomics foundation of Macroeconomics   **(9 hours)**
Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life cycle and permanent income hypothesis; rational expectations and random walk of consumption expenditure, Investment: determinants of business fixed investment; residential investment and inventory investment

UNIT – II: Aggregate Demand and Aggregate Supply   **(6 hours)**
Derivation of aggregate supply curve; Interaction of aggregate demand and supply to determine equilibrium output, price level and employment, The aggregate supply curve and the price adjustment mechanism.

UNIT – III:Labour markets, Employment and Prices   **(18 hours)**
The labour market: - determination of wages, prices, unemployment, Natural rate of unemployment and NAIRU, stagflation, expected inflation. Philips curve, inflation-expectations augmented Phillips curve, the wage-unemployment relationship: Sticky wages; from Phillips curve to the aggregate supply curve; the costs of unemployment and inflation,

inflation and indexation: inflation-proofing the economy; Theory of Expectations, Inflation, unemployment and expectations, Phillips curve and adaptive and rational expectations; Dynamics of Inflation and Unemployment: Inflation, expectation and the aggregate supply curve, short and long runaggregate supply curves, dynamic aggregate demand curve; Inflation and output, the adjustment process, dynamic adjustment, interest rate and inflation: the Fishers Equation.

UNIT – IV:Open Economy Macroeconomics   (12 hours)
Balance of Payments, Kinds of exchange rate, Nominal and Real Exchange rate, fixed and flexible exchange rate, Marshall Lerner condition & J curve, Mundell Fleming model, Exchange rate determination: Purchasing power parity, asset market approach and monetary approach to Balance of Payments (BoP)

Essential/recommended readings

1.   Dornbusch, R., Fischer, S. and Startz, R., 2014. Macroeconomics. 11th edition, New York, McGraw-Hill Education.

2.   Dornbusch, R. and Fischer, S. (2000) Macroeconomics. 6th Edition. McGraw-Hill Education.

3.   Blanchard, O. (2006). Macroeconomics, 4th ed. Pearson Education.

4.   C.L.F. Attfield, D. Demery and N.W. Duck, (1991) Rational expectations in macroeconomics: An introduction to theory and evidence (2nd Ed.)

5.   Carlin, W and D Soskice (2007), Macroeconomics: Imperfections, Institutions and Policies, Indian Edition, OUP.

6.   David C. Colander (2017) Macroeconomics (9th edition), McGraw Hill

Suggested readings

1.   Bradley R. Schiller and Karen Gebhardt (2019) Macro economy Today (14th edition), McGraw Hill

2.   Richard T. Froyen (2013). Macroeconomics: Theories and Policies (10th ed.), Pearson.

3.   Government of India (GOI) (Latest Year), Economic Survey, Ministry of Finance New Delhi.

4.   Government of India (GOI) (Latest Year), Handbook of Indian Economy, RBI Publication New Delhi.

5.   N. Gregory Mankiw, Macroeconomics, Worth Publishers.

6.   Chugh, S. (2015) Modern Macroeconomics, MIT Press.

7.   D'Souza, E, Macroeconomics, Pearson Education

8.   D. N.Dwivedi (2015), Macroeconomics- Theory and Policy, McGraw-Hill.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Statistics for Business Economics - II (DSC 11)	4	3	0	1	Class 12	Mathematics at Class 12 level

Learning Objectives

This course aims to develop an understanding of:

- Theories of probability distribution.
- Sampling techniques and types of sampling.
- Methods of estimation
- Testing of Hypothesis.

Learning outcomes

By studying this course, the students will be able to:

- Understand the formulation of complex decision-making problems in an uncertain environment using different statistical techniques.

- Study various research designs and appropriate sampling techniques.

- Analyze and apply some basic stochastic processes for solving real life situations and to execute statistical analyses with professional software.

- Draw conclusion about the population using hypotheses testing.

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SYLLABUS OF DSC-11

UNIT – I: Theoretical Probability Distributions (15 hours)
Discrete: Binomial and Poisson. Continuous: Normal. Mean and variance. Applications.
Bivariate distributions: covariance and correlation.

UNIT – II:Sampling (9hours)
Random sampling; sampling methods; statistics and their distributions; central limit theorem, distribution of linear combination of random variables.

UNIT – III:Estimation (12 hours)
Point estimators and properties. Methods of point estimation. Sampling distributions: t, chi square and F. Interval estimation for mean, proportion and variance.

UNIT – IV: Testing of Hypothesis (9 hours)

Null and alternative hypotheses. Types of errors. Testing for the population mean, proportion and variance. One and two tail tests. P-values. Testing for difference in means and proportions; comparing variances.

Practical component (30 hours) –Practicals to be based on aspreadsheet software (Microsoft Excel or equivalent) to enable students to execute all the measures and tests taken up in the theory classes in the course.

Essential/recommended readings
1. Devore, Jay L., (2012). Probability and Statistics for Engineering and the sciences.8th Edition, Cengage Learning.

Suggestive readings
1. Miller, Irwin and Marylees Miller. John E. Freund's Mathematical Statistics with Applications, Eighth Edition, Pearson Education.

2. Nagar, A.L., and R.K. Das. Basic Statistics, Second Edition, Oxford University Press

3. Gupta, S.C., Fundamentals of Mathematical Statistics, Himalaya Publishing House

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE – (DSC-12): MARKETING MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Essentials of Marketing Management (DSC 12)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to develop an understanding of

- Firm's internal and external marketing environment.
- Segmentation and defining the target market for a selected product or service.
- Product decisions and use of pricing strategies.
- Relevance of distribution and promotional strategies in supporting marketing strategies.

Learning outcomes

By studying this course, students will be able to:

·   Understand the business environment including the economic, social, political, legal, and technological forces.

·   Develop key strategies for developing brands including brand equity, brand identity and brand and line extensions.

·   Recognise different pricing strategies and understand issues related to distribution.

·   Understand the elements of promotion- advertising, sales promotion, events, public relations and publicity, direct marketing, interactive marketing, word of mouth and public selling.

SYLLABUS OF DSC-12

UNIT – I: Introduction and Environment   **(9hours)**
Importance and Scope of Marketing; Core Marketing Concepts; Company Orientations. Marketing Environment, an Economic Perspective: Economic, Demographic, Socio- Cultural, Technological, Political and Legal. Influence of Current Economic Situation on Marketing Functions. Michael Porter's Model of Competitive Analysis

Unit 2: Segmentation, Targeting & Positioning   **(9 hours)**

Market Segmentation - Bases for Segmenting Consumer Market.Market Targeting- Evaluating and Selecting Market Segments. Positioning- Positioning Statement, POP and POD

Unit 3: Product & Pricing   **(12 hours)**
Product Life Cycle- Concept and Strategic Implications; Product Mix and Line Decisions- Product Line Length, Modernisation, Line Pruning and Filling; Cannibalisation; BCG Matrix, ANSOFF Matrix; Branding- Brand Identity, Brand Equity, Brand Name Decisions. Services- Characteristics of Services. Pricing Strategies (Geographical Pricing, Price Discounts & Allowances, Promotional Pricing Tactics, Psychological Pricing, Price Discrimination)

Unit 4: Distribution & Promotion   **(15hours)**
Channels Functions and Flows; Channel Levels.Retailing- Marketing Decisions in Retailing. Promotion: Promotion Mix; Concept Of Integrated Marketing Communication.
Advertising- Advertising Objectives, Advertising Budget, Message Generation, Media (Types, Reach Frequency, Impact); Measurement; Sales Promotion (Objectives, Major Decisions in Sales Promotion, brand dilution); Personal Selling; Events and Experiences; Public Relations and Publicity; Direct Marketing; Interactive Marketing (Introduction to Online Marketing).Word Of Mouth and Word of Web.

Essential/recommended readings
1.   Kotler, P. & Keller, K. L. Marketing Management. Pearson Publications.

2.   Kotler P, Armstrong G., Agnihotri P.Y &UlHaq, E. Principles of Marketing - A South Asian Perspective. Pearson Publications.

3.   Ramaswamy V.S, Namakumari S. Marketing Management: Global Perspective Indian Context. Macmillan Publishers.

Suggestive readings
1.   Dawn Iacobucci. Marketing Management. Cengage Learning.

2.   Etzel M. J, Walker B.J, Stanton W.J and Pandit A. Marketing. Tata McGraw Hill.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Public Finance (DSE2)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to develop an understanding of
- Fundamental concepts of Public Finance.
- Economics of government expenditure and taxation
- Efficiency and equity aspect of taxation of centre and state government.
- Different types of canons in taxation.

Learning outcomes

By studying this course, the students will be able to:

- Apply tools of basic microeconomics to key policy issues relating to the spending, taxing and financing activities of the Government.

- Understand difference in impact of direct and indirect taxation.

- Understand the recent developments and issues in Indian Public Finance.

SYLLABUS OF DSE-2

Unit 1: Theory of Public Finance   (12 hours)

Public finance: Meaning, nature, scope and importance, difference between private and public finance. Principle of maximum social advantage.Role of state in public finance. Elementary theory of product and factor taxation.
Sources of revenue: taxes, loans, grants and aid – meaning and types, Principle of public expenditure. Public finance and the economic system.

Unit 2: Current Issues in Indian Tax System   (12hours)

Direct and Indirect Tax Reform in India, Different forms of direct tax in India,
Changing regime of taxation-direct to indirect taxation.
Introduction of GST and its implication for state finances and fiscal federalism in India,
Latest finance commission and its recommendation for fiscal devolution.

Unit 3: Center State Financial Relations   (9hours)

Center state fiscal relations, horizontal and vertical tax devolution in India,

State and local finance in India.
Performance and Equity debate in fiscal devolution in India.
Report of finance commission in post liberalisation period.

Unit 4: Principles of Taxation   **(12 hours)**
Canons of taxation, Meaning of Canons of Taxation -Types of Canons of Taxation-Canon of equality or equity, Canon of certainty, Canon of economy, Canon of productivity, Canon of Diversity, Canon of convenience, Canon of elasticity, Canon of simplicity, Canon of diversity, Characteristics of Canons of Taxation.

Essential/recommended readings

1 Musgrave, R. A. and Musgrave, P.B., Public Finance in Theory and Practice (1989), 5th edition. McGraw Hill Education.

2. Bagchi, Amaresh. Reading in Public Finance, Oxford University Press.

3. Bhatia H.L.. Public Finance. Vikas Publishing House;

4. Shankar Acharya, Thirty years of Tax Reforms in India, EPW, May 2005

5. Rao, M. Govinda, "Central transfers to states in India: rewarding performance while ensuring equity." Final report submitted to NITI Aayog (2017) (pages 1 to 18).

6. Government of India, Fifteenth Finance Commission Report 2021-26, Chapter 6

 Suggestive readings

1. Report of Finance commission of India, Various years.

2. Economic Survey, GoI, Various year

3. State Finances: - A Study of Budget, RBI, Latest report

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Advertising Management (DSE 4)	4	3	1	0	Class 12	None

Learning Objectives

To provide students with an understanding of:
- Fundamentals of advertising.
- Planning advertisements to target audience needs using product benefits and product characteristics.
- Crafting an effective creative brief to direct the approach to an advertising campaign.
- Various types of advertising media.

Learning outcomes

By studying this course, the students will be able to:

·   Understand the role played by advertising agencies.

·   Recognise and identify the facet model objectives in any advertisement.

·   Conduct situation analysis and consumer insight mining.

·   Learn creative execution strategies including application of appeals, layouts and creative copywriting.

·   Understand and conduct appropriate media mix selection.

SYLLABUS OF DSE-4

Unit 1: Foundations of Advertising   (12 hours)

Concept of advertising, Types of advertising, Concept of IMC, Role and functions of Advertising, the key players, functions of advertising agencies, Organisation of agency, Advertising appropriateness- factors influencing advertising budgets, methods of setting advertising budgets.

Unit 2: Planning and Strategy   (12hours)

Planning Framework-marketing and advertising plan, Facet model of objectives (Perception, Cognition, Affect, Association, Action), DAGMAR, Marketing strategy and situation analysis, consumer insight mining, big idea, positioning for advertising campaigns.

Unit 3: Effective Advertising Execution   (12hours)

The creative and message strategy, creative brief, themes and appeals, execution styles, message format, message tone, copywriting creativity, body copy, visual layouts, evaluation of effectiveness, pre-testing, post-testing.

Unit 4: Effective Advertising Media   **(9hours)**

Types of media, newer media options, media objectives, developing a media plan, media Plan budget, media mix selection.

Essential/recommended readings

·1.   Belch,G.E., Michael, A., Keyoor, Purani. Advertising and Promotion-An Integrated Maketing Communications. 12th edition. Tata McGraw Hill Education. 2021.

2.   William Wells, Sandra Moriarty, and John Burnett. Advertising: Principles and Practice. Prenctice Hall of India. 2007.

3.   Jethwaney, Jaishri., Jain, Shruti. Advertising Management. Oxford University press.

4.   Shah, Kruti. Advertising and Integrated Marketing Communications. McGraw Hill Education India. 2014.

5.   Aaker, David A., Batra, Rajeev., Myers, John G. Advertising Management. Pearson Education. 2006.

6.   Shimp, T.A. .Advertising and Promotion: An IMC Approach. Cengage. 2013.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Financial Management (DSE 6)	4	3	1	0	Class XII	None

Learning Objectives

This course aims at inculcating an understanding of:

- Key features of international finance and foreign exchange markets.
- Theories of International finance that link exchange rates with interest rates and inflation rates in different countries.
- Evolution of exchange rate system in the international financial markets.
- Determination of exchange rate, types of foreign exchange risks and risk management strategies.

Learning outcomes

By studying this course, the students will be able to:

· Gain substantive knowledge of International Financial Management.

  · Understand the principles of trading in foreign exchange markets, different instruments traded, risks involved and how to carry out hedging of currency risks.

  · Learn how to compute forward rates using cross rates, computation of synthetic quotes and apply rules to determine existence of arbitrage amongst currencies traded.

  · Understand how the international markets have evolved and the alternate exchange rate systems world has seen over the years

SYLLABUS OF DSE-6

Unit 1: Introduction To Currency Markets   **(12 hours)**

Spot &Forex market: Introduction and Features, Participants, & their method of communication in forex markets, SWIFT and CHIPS. Currency Quotes and types, Calculation of forward rates using spot rates, Discount/Premium on spot rate, Swap Points and Outright Forward Rates, Forward Rate vs. Expected Future spot rates, Spot rate with and without transaction costs, Payoff Profiles on Forward Exchange, Currency futures and

Pay of Profiles, Mark to Market, Cross Rates & Synthetic quotes. Arbitrage: one point, two point and three point (triangular) arbitrage.

Unit 2: Parity Conditions in Currency Markets   (12 hours)
Purchasing Power Parity (both absolute and relative versions), Interest Rate Parity (explanation of borrowing and lending criteria, diagrammatic presentation) , covered interest rate parity, International Fischer Effect. The linkages between parity conditions.

Unit 3: Alternate Exchange Rate Systems and Payment Terms   (9 hours)

Gold Standard and Gold Exchange Standard System with price adjustment mechanism , EMS and its price adjustment, Hybrid systems , Fixed vs Flexible System, Overview on Brettonwoods System, IMF, SDR, Triffon Paradox & Smithsonian Agreement. Payment Terms and Methods of Financing International Trade (Letter of Credit, Forfaiting, Factoring, Credit Lines)

Unit 4: Exchange Rate Determination and Exposures   (12 hours)

Currency Demand and Supply Curves, Stability of exchange rates and 'J' Curve Effect, Factors Affecting Exchange Rate, Foreign Exchange Exposure: Nature, Definition, Exposure Line and Interpretating Exposure, Statistical Measurement of Exposure, Types of Exposure (Meaning): Transaction, Economic and Translation Exposure, Hedging Strategies to Manage Transaction Exposures. Currency Swaps.

Essential/recommended readings

1.   Apte, P G., Multinational Financial Management.Tata-McGraw Hill. New Delhi.

2.   Levi, Maurice. International Finance. McGraw Hill Inc. New York.

3.   Madura, Jeff. International Financial Management.South Western Cengage Learning.

4.   Seth, A.K., International Financial Management. Galgotia Publishing Company. New Delhi.

5.   Shapiro, Allen C., Multinational Financial Management. Prentice Hall India Pvt Ltd. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

GENERIC ELECTIVES (GE-2): INTRODUCTION TO DIGITAL MARKETING

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Introduction to Digital Marketing (GE - 2)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to acquaint the students with:
- Key marketing principles and terminology.
- Evolving digital landscape and the strategic role of digital marketing processes and tools in designing the overall Marketing strategy.
- Methodologies, tools and technologies involved in digital marketing.
- Importance of search engines and their role in digital marketing ecosystem.

Learning outcomes

By studying this course, students will be able to:

· Understand the concept of digital marketing and its integration with traditional marketing.

· Understand customer value journey in digital context and behaviour of online consumers.

· Learn email, content and social media marketing and apply the learnings to create digital media campaigns.

· Examine various tactics for enhancing a website's position and ranking with search engines and search advertising.

SYLLABUS OF GE-2

Unit 1: Fundamentals of Marketing   (6hours)

Importance of marketing; Core marketing Concepts; Company Orientations; Concept of Segmentation, Targeting-Positioning; 7 P's Framework; Product Life cycle; Pricing strategies, Types of distribution channels; Promotion Mix.

Unit 2: Marketing in the Digital World   (9 hours)

Digital marketing: Concept, Features, Difference between traditional and digital marketing, Moving from traditional to digital Marketing; Digital Marketing Channels: Intent Based-SEO, Search Advertising; Brand Based- Display Advertising; Community Based-SMM; Others- Affiliate, Email, Content, Mobile; Customer Value Journey: 5As Framework; The Ozone O_3 Concept Key; Traits of online consumer.

Unit 3: Content, Email and Social Media Marketing   **(15 hours)**

Content Marketing: Developing a content marketing strategy; Email Marketing: Types of Emails in email marketing, Email Marketing best practices; Social Media Marketing: Building Successful Social Media strategy; Social Media Marketing Channels; Facebook, LinkedIn, YouTube (Concepts and strategies)

Unit 4: Search Marketing   **(15 hours)**

Introduction of SEM: Working of Search Engine; SERP Positioning; Search Engine Optimization: Overview of SEO Process; Goal Setting-Types

On-Page Optimization: Keyword Research, SEO Process -Site Structure, Content, Technical Mechanics, Headings, Image & Alt text, Social Sharing, Sitemaps, Technical Aspects-Compatibility, Structured Data Markup.

Off Page Optimization: Link Formats, Link Building, Content Marketing, Social Sharing; Black and White Hat Techniques

Search Advertising: Overview of PPC Process; Benefits of Paid Search; Basis of Ranking; Goal Setting-Objectives; Account Setting-Creation of Google Ads, Campaign architecture, Campaign setup, Targeting, Bid Strategy, Delivery, Ad Scheduling, Ad Rotation, Keyword Selection; Ad Copy composition, Ad Extension

Overview of Display Advertising: Working of Display Advertising; Benefits and challenges.

Essential/recommended readings

1. Dodson, I. (2016). The art of digital marketing: the definitive guide to creating strategic, targeted, and measurable online campaigns. John Wiley & Sons.

2. Kartajaya, H., Kotler, P., &Setiawan, I. (2016). Marketing 4.0: moving from traditional to digital. John Wiley & Sons.

3. Ryan, Damien. Understanding Digital Marketing - Marketing Strategies for Engaging the Digital Generation. Kogan Page Limited.

Additional References:

1. Kotler, P. (2009). Marketing management: A South Asian perspective. Pearson Education, India.

2. Maity, Moutusy. Internet Marketing: A practical approach in the Indian Context. Oxford Publishing.

3. Gupta, Seema. Digital Marketing. McGraw Hill

4. Ultimate guide to digital Marketing. Digital Marketer

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Statistics for Business (GE-4)	4	3	0	1	Class 12	Mathematics at Class 12

Learning Objectives

The objective of this course is to enable students to:
- Describe data using summary statistics.
- Develop detailed understanding of discrete and continuous distributions.
- Develop skills in statistical computing, statistical reasoning and inferential methods.
- Comprehend and analyse real data like real indices.

Learning outcomes

By studying this course, students will be able to:

· Learn tools and concepts of statistical analysis and interpretation.

· Comprehend fundamentals of probability theory.

· conduct statistical computing, statistical reasoning and use inferential methods.

· Comprehend and analyse real data like real indices.

SYLLABUS OF GE-4

Unit 1: Descriptive Statistics and Exploratory Data Analysis   (12hours)

Types of Variables (Quantitative, Qualitative, discrete, continuous), Scales of Data Measurement (nominal, ordinal, Interval & Ratio), Variable-; Primary & secondary Data.

Frequency distributions, Relative Frequency, Cumulative Distributions, Percentiles, Quartiles; Graphical representation of data- bar charts, pie, histograms, box plots.

Univariate Measures Mean, median, mode, Geometric Mean, Harmonic Mean, Weighted Mean & their properties. Selection of a measure of central tendency. Range, inter-quartile range, quartile deviation, mean deviation, standard deviation, variance, coefficient of variance, properties of standard deviation, merits & demerits. Skewness and Kurtosis: Meaning, measures- Karl Pearson, Bowley, Kelly's, Kurtosis- meaning, Moments, Kurtosis

Bivariate Analysis: Cross-tabulations and Scatter diagram; Correlation, Association and linear regressions

Unit 2: Probability and Distributions   (12 hours)

Axioms of probability; Review of counting rules, experiments, sample space, simple and complex events; Addition and multiplication rules; Concepts of Mutually exclusive events, independent events; Concepts of Joint, marginal and conditional probability; Permutation and Combinations

Concept of Discrete and continuous Random Variables; Expected value and variance; Examples of Theoretical Discrete and Continuous Probability Distributions – Binomial, Poisson and Normal distributions.

Unit 3: Sampling, Estimation and Hypotheses   (15 hours)

Sample Statistics versus population parameters; Definition and Statistical properties of a Random Sample; Point and Interval Estimation and Small Sample Properties of Estimators (unbiasedness, efficiency); Central Limit Theorem. (Interval estimation for mean for large samples)

Basic concepts of Hypotheses Testing: Formulation of Null and Alternate Hypotheses; One-tailed and two-tailed Tests about population Mean; Concepts of Type I and Type II errors. (Hypothesis testing for mean and difference between mean for large samples only)

Unit 4: Index Numbers   (6hours)

Index Numbers: Use and construction of Laspeyres and Paasche indexes; Fixed and chain base index numbers; Construction of real indexes: Consumer Price Index and BSE index.

Practical component (30 hours) - Practicals to be based on a spreadsheet package (Microsoft Excel or equivalent) to enable students to execute all the measures and tests taken up in the theory classes in the course.

Essential/recommended readings

1.   Spiegel, M.R.(2003). Theory & Problems of Statistics, Schaum's outline series, McGraw Hill.

2. Levin, Richard I. and Rubin, David (1998). Statistics for Management (7th Edition), Pearson.

3.   Gupta, S.C. (2018). Fundamentals of Statistics, Himalaya Publishing House

4. Spiegel, M. and Stephens, Larry (2017). Statistics (Schaum's Outline Series), Tata-Mcgraw-Hill, New Delhi

Suggestive readings

1. Nagar, A. L. and Das. R. K.. Basic Statistics (2nd Edition), Oxford University Press

2. Karmel, P. H. and Polasek, M. (1978). Applied Statistics for Economists (4th edition), Pitman.

3. Larsen, Richard J. and Marx, Morris L. (2011). An Introduction to Mathematical Statistics and its Applications. Prentice Hall.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Introduction to Finance (GE-6)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at providing a comprehensive introduction to:
- Financial system and its primary constituents.
- Sources of finance and time value of money.
- Basics of Investment and various asset classes.
- Key concepts of international financial management.

Learning outcomes

By studying this course, students will be able to:

- Understand the meaning, scope and sources of Finance

· Estimate the present and future values of assets

· Examine the relationship between risk and return, and the nature and sources of risk in a stock market context

· Analyse the currency exchange market to deal exchange rate risk.

SYLLABUS OF GE-6

UNIT – I: A Primer on Financial Markets & Institutions (9hours)
An overview of financial system: characteristics & requirements. Components & functions of financial system. Financial markets: characteristics & types. Types & role of Financial Institutions. An overview of the 2007–2008 Financial Crisis.

Unit 2: Corporate Finance: An Overview (12hours)
Nature, scope and objectives of Finance, Emerging role of Finance Managers in India and Agency problem.Concept & Meaning of Financial Management, goals of financial management, the three financial decisions- Investing, Financing & Dividend.
Sources of Finance: Equity & Preference Capital, Retained earnings, Debt, Bonds, Long term loans, Short term advances from banks, public deposits & advances from customers and trade creditors.
Concept of Time Value of Money, Compound Value, Present Value, Annuity and Perpetuity.

Unit 3: Investment Management: Basics & Process (15 hours)
An overview of investment- Investment process, Types of assets- real & financial.Types of investors, types of financial securities & attributes of a good investment.

Concept of Risk & Return (Single asset), risk-return trade off, types of risk- systematic & unsystematic, types of return-holding period return, expected return, actual return.
Examining four broad asset classes: equity, bonds, mutual funds & derivatives.
Equity- three schools of thought on equity valuation- a brief discussion on fundamental analysis, technical analysis and efficient market hypothesis.
Bonds- types, fundamentals, relationship between interest rates & bond prices& yield curve.
Mutual Funds– meaning, importance, structure, mutual fund schemes, Systematic Investment Plan (SIP), Systematic Withdrawal Plan (SWP), Exchange Traded Fund (ETF), Equity Linked Savings Scheme (ELSS) and NAV of Fund.
Derivatives – Meaning and Types of Derivative Instruments (Forwards, Futures, Options and Swaps).
Concept of diversification & portfolios. Portfolio Risk &Return(two security only).

Unit 4: A Beginners' Guide to International Finance   **(9hours)**
International Monetary System- development of international finance and how the international monetary system evolved. Currency exchange markets and rates- currency exchange markets, exchange rate quotations, currency exchange rate appreciation and, depreciation, factors that affect currency exchange rates and arbitrage. Conducting business internationally. Concept of exchange rate risk.

Essential/recommended readings
1.   Bodie, Zvi., Kane, Alex and Marcus, Alan J.. Investments. McGraw Hill.

2.   Chandra, P.. Security Analysis and Portfolio Management. Tata McGraw Hill.

3.   Pathak, Bharati. Indian Financial System. Pearson.

4.   Ronald, W. Melicher and Norton, Edgar A.. Introduction to Finance: Financial
        Markets, Investment, and Financial Management. Wiley Publishing House. 2012.

5.   Rustagi, R.P., Fundamentals of Financial Management. Taxmann.

Suggestive readings
1.   Khan, M. Y & Jain P. K., Financial Management: Text and Problems. Tata McGraw Hill.
        New Delhi.

2.   Kohn, Meir. Financial Institutions and Markets. Oxford University Press.

3.   Kidwell, David S., Backwell, David W., Whidbee, David A. and Sias, Richard W.
        Financial Institutions, Markets and Money. Wiley Publications.

4.   Madura, Jeff. Financial Markets and Institutions. South Western Cengage Learning.

5.   Reilly, Frank K, and Brown, Keith C. Investment Analysis and Portfolio Management.
        Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-8): ENVIRONMENTAL ECONOMICS AND CLIMATE CHANGE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Environmental Economics and Climate Change (GE-8)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at inculcating an understanding of:
- How economic activities are affecting the environment.
- Social value of environmental resources.
- Climate change and its consequences.
- Efficient and effective policy measures for protecting the environment.

Learning outcomes

By studying this course, students will be able to:

∴ Understand the linkage between environment and economics.

· Learn the basic theories of environmental economics.

· Understand the basic terminologies related to environment and Climate change.

· Analyse the effects of climate change on India and its future plan for environmental protection and mitigation.

SYLLABUS OF GE-8

UNIT – I: Introduction (8 hours)
Introduction to Environmental Economics, Material Balance model- economy environmental interactions, reasons for environmental degradation (population, technology, GDP), balance between environment and growth.

Unit 2: Economic Growth and Environmental Degradation (10 hours)
Theories of relationship between economic growth and environmental degradation: The environmental Kuznets curve hypothesis, The Brundtland Curve hypothesis, The environment Daly Curve hypothesis.

Unit 3: Climate Change and its Challenges (15 hours)
Introduction to the Climate Change, Drivers of Climate Change, Global impacts of Climate Change: Anthropogenic, Global warming, ozone hole, biodiversity loss, ecosystem services, natural capital and resources. Effect of Climate Change on India: Agriculture, Biodiversity, vulnerability of Coastal Belt, Rural Livelihoods and Food Security in India.

Unit 4: Actions Taken and Policy Framework **(12 hours)**
Global Level: Adaptation and Mitigation, Governmental and Intergovernmental Actions to Combat Climate Change: The Role of the Intergovernmental Panel on Climate Change (IPCC), United Nations Framework Convention on Climate Change, The Kyoto Protocol, Paris Agreement etc. The global carbon market (CDM, JI, ET).India's Position on International Climate Negotiations, India's National Action Plan on Climate Change.

Essential/recommended readings

1.   Callen,Thomas (2007). Environmental Economics, Thomson Learning Inc. Indian Edition.

2.   Dubash, Navroz (2012). Handbook of Climate Change and India: Development, Politics and Governance, Earthscan

3.   Bhattacharya, R. N. (ed.) (2001). Environmental Economics, An Indian Perspective, Oxford University Press.

Suggestive readings

1.   Romm, J.J. 2018. Climate change: What Everyone Needs to Know. Oxford University Press

2.   Dash. S.K. 2008. Climate Change, Cambridge University Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER -V

DISCIPLINE SPECIFIC CORE COURSE – 13 (DSC-13): BASIC ECONOMETRICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Basic Econometrics (DSC 13)	4	3	0	1	Class 12	Maths at Class XII level

Learning Objectives

The course aims to:
- To introduce classical and functional forms of linear Regression Model.
- To make statements or hypothesis that are mostly qualitative in nature in multi regression model
- To understand interaction between quantitative and qualitative variables and Use of dummy variables.
- To apply multicollinearity, heteroscedasticity, autocorrelation and specification errors, its detection and corrective measures.

Learning outcomes

By studying this course, the students will be able to:

. To explain key econometric concepts.

·   Formulate simple econometric models

·   Interpret the regression results obtained from software packages.

·   Identify the errors in regression models and rectify the same.

·   Analyse the suitability of the data for solving the problem at hand

SYLLABUS OF DSC-13

UNIT–I: The Classical Linear Regression Model   **[18hours]**

Types of Data: Time Series, Cross Section and Panel Data. Concept of Population Regression Function and Sample Regression Function, Assumptions of the model, Derivation of Coefficients of Regression in a two-variable model, Estimation of the SRF using OLS, Analysis of variance and R squared.

Expectation and standard errors of the regression coefficients and the error term. Gauss Markov Theorem. Interval estimation and tests on population regression coefficients, variance of population disturbance term and forecasts. Testing the significance of the model as a whole. Testing the normality assumption.

Extensions of the Two Variable Linear Regression Model: Regressions through the origin, Scaling of Variables and Regression on Standardized Variables. Functional forms of Linear Regression Models: The double log, semi-log, reciprocal, log- reciprocal models with applications.

Unit 2: Multiple Regression Model   [12hours]

Coefficients of regression in a multi variable model and their properties. Interval estimation, tests on population regression coefficients and model significance. Correlations, Goodness of fit and the Adjusted R square. Hypothesis testing for significance of the contribution of a variable, structural stability, restricted least squares.

Unit 3: Dummy Variable Regression Models   [6hours]

Intercept, Slope Dummy variables. Interaction between qualitative variables. Interaction between quantitative and qualitative variables. Use of dummy variables in testing for structural change and for seasonal indices.

Unit 4: Relaxing the Assumptions   [9hours]

Introduction to multicollinearity, heteroscedasticity, autocorrelation and specification errors. The nature of the problem, its detection and corrective measures.

Practical Component (30 hours) : Practicals to be based on an econometric software (e.g., Gretl/SPSS/PSPP). The student is expected to implement using the software, all the regressions and tests noted in the syllabus. An econometric project to be taken up ans assessed as part of the practical internal assessment.

Essential/recommended readings
1.   Gujarati, D. and Sangeetha, N. (2007) Basic Econometrics. Fourth Edition, Tata McGraw-Hill, New Delhi

2.   Dougherty, Christopher. (2011). "Introduction to Econometrics," Oxford University Press,

3.   Wooldridge, J. M. (2006). Introductory Econometrics: A modern approach. Mason, OH: Thomson/South-Western.

Suggested readings

1.   Asteriou, D., & Hall, S. G. (2011). Applied econometrics. Palgrave Macmillan.

2.   Brooks. Chris.(2008) Introductory Econometrics for Finance, Second Edition Cambridge University Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Organisational Behaviour (DSC 14)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at:
- To explain core concepts of organizational behaviour
- To apply motivation theories and analysis of interpersonal relationships
- To apply leadership theories to understand leadership traits and issues
- To manage conflict and enhance well being at workplace

Learning outcomes

By studying this course, the students will able to:

- Understand the importance of organizational behaviour as a field of study.

- Understand the role of perception, personality and learning in explaining Individual behaviour and to Apply different motivational theories and leadership styles to increase the productivity and job satisfaction of employees.

- Understand the foundations of group behaviour and the framework for organizational change and development.

- Identify methods to enhance individual and Organizational wellbeing and resolve organizational problems.

SYLLABUS OF DSC-14

UNIT – I: Core Concepts in Organisational Behaviour   (12hours)

Conceptual Foundations and Importance of organizational behaviour. Perception and Attribution: Concept, Factors affecting Perception, Attribution theory, Perceptual Organization and Errors in Perception. Personality: Concept, Factors affecting personality and Theories. Learning: Concept and Theories of Learning, Concept of Reinforcement, Schedules of Reinforcement.

Unit 2: Motivation, Interpersonal Relations and Change Management(12hours)

Motivation: Concepts and their application, Content theories (Maslow, McClelland and Herzberg's Theories); Process theories (Expectancy theory, Equity theory). Analysis of

Interpersonal Relationship: Transactional Analysis, Johari Window. Organisational Change: Concept, Resistance to change, managing resistance to change, Kurt Lewin Theory of Change.

Unit 3: Leadership and Group Processes   (9 hours)

Leadership: Trait Approach, Behavioural theories (Ohio and Michigan State Studies, and Blake & Mouton's Managerial grid), and Contingency theories (Fiedler's Contingency Model, Hersey & Blanchard's Situational Leadership Model) Contemporary Leadership issues: Charismatic, Transactional and Transformational Leadership. Groups and Teams: Definition, Stages of Group Development, Group Processes-Group Cohesiveness, Group Think, Group Shift.

Unit 4: Managing Conflict and Enhancing Wellbeing   (12 hours)

Organisational Power and Politics: Concept, Sources of Power, Tactics to gain power in Organizations. Nature of organisational politics. Conflict: Concept, Sources, Types, Stages of conflict, Management of conflict. Well-being at Work: Importance and Impact of employee emotions and emotional intelligence in organisations. Work stress and its management.

Essential/recommended readings

1. Stephen P. Robbins, T. A. Organisational Behavior. Pearson.

2. Aswathappa, K., & Reddy, G. S. Organisational behaviour (Vol. 20). Mumbai: Himalaya Publishing House.

3. Luthans, Fred, Organisational Behaviour, Tata Mc Graw Hill.

4. Singh, Kavita, Organisational Behaviour, Pearson.

5. Greenberg Jerald and Baron Robert, A. Behavior in Organisations: Understanding and Managing Human side of work. Prentice Hall of India

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Industrial Economics (DSC 15)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to:
- To understand basics of industrial economics and its scope
- To understand concept and theories of market structure.
- To analyse issues related to market conduct like Entry and Exit Barriers, Pricing Behavior, Research and Innovation, Mergers and Acquisitions and Legal Tactics.
- To explore the role of public policy in Indian industries

Learning outcomes

By studying this course, students will be able to:

· Enable the student to understand how the Industries Function in the real world

· Understand what is market concentration and how does it affect market power

· Know how different strategies are used, under the structure-conduct-performance paradigm, by the firms to maximize their market power.

· Know the importance of regulatory public policy in oligopolistic market, in order to ensure maximum consumer welfare.

SYLLABUS OF DSC-9

UNIT – I: Structure- Conduct- Performance Paradigm   **(12 weeks)**

Basic understanding of Industrial Economics, Scope of Industrial Economics, Structure-Conduct- Performance Model, Different School of Thoughts, Theory of Firm and basic conditions of Demand and Cost.

Unit 2: Market Structure and Concentration   **(12hours)**

What is Market Concentration, Theories of Measurement of Concentration, Deterministic and Stochastic Approach, Lerner and Herfindahl Index, Product Differentiation, Horizontal, Vertical and Conglomerate Mergers, Vertical Integration.

Unit 3: Market Conduct   **(12hours)**

Entry and Exit Barriers, Pricing Behavior, Advertising, Product Strategy, Research and Innovation, Mergers and Acquisitions, Legal Tactics.

Unit 4: Public Policy and Indian Industries   **(9hours)**

Role and Importance of Industry Regulation, Regulation of Natural Monopoly, Antitrust Legislations and Indian Industries, Social Concerns and Advertising.

Essential/recommended readings

1.   Cabral Luis M.B. (2017). Introduction to Industrial Organization. 2ndEdn. Cambridge, MA: MIT Press

2.   Carlton, D.W. and J. M. Perloff. (2005). Modern Industrial Organization. Pearson

3.   Shy, Oz. (1996). Industrial Organization: Theory and Applications. The MIT Press.

4.   Waldman D.E. and E. J. Jensen. (2019). Industrial Organization: Theory and Practice.

Suggestive readings
1.   Tremblay, Victor J., and Carol Horton Tremblay. (2012), "New Perspectives on Industrial Organization", New York: Springer.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Income Tax Law and Practice (DSE1)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at
- Introducing basic definitions in Income Tax Act
- Computing taxable income under the heads Salaries and House Property
- Calculate Profits and Gains of Business or Profession, Capital Gains and Income from other sources
- Understand deductions from gross taxable income and filling of returns.

Learning outcomes

By studying this course, the students will be able to:

·   Understand the Process of determination of taxable income

·   Apply the deductions to taxable income as per the latest provisions of Income-tax Act, 1961

·   Acquire the skill of Filling Basic Returns of Income Tax

SYLLABUS OF DSE-1

Unit 1: Introductory Concepts   **(3 hours)**

Permanent Account Number (PAN), Assessment Year, Previous Year, Person, Assessee, Gross Total Income, Total income and its computation, Tax Rates, Residential status; Relationship between Residential Status and Incidence of Tax. Incomes Exempted under section 10.

Unit 2: Computation for "Salaries" and "Income from House Property"   (15 hours)

Income under the head "Salaries": Meaning of Salary, basis of charge, Allowances, Perquisites, permissible deductions from salary income, Deduction under Section 80 C.

Income under the head "Income from House Property": Basis of charge, income from let out house property, income from self-occupied property.

Unit 3: Computation for 'Profits and Gains of Business or Profession', 'Capital Gains' and 'Income from other sources' (15 hours)

Profits and gains of business or profession: Basis of charge, important rules regarding assessment of PGBP, computation of Profits from Business or Profession, deductions expressly allowed, expenses expressly disallowed.

Capital gains: basis of charge, meaning of capital asset, cost of acquisition, improvement and indexation, exemptions for capital gains arising from transfer of Capital Assets, calculation of tax on short-term and long-term capital gains.

Income from other sources: basis of charge, dividend, winnings from lotteries, crossword puzzles, etc., interest on securities, advance money received for transfer of a capital asset, permissible deductions.

Unit 4: Computation of Total Income and Tax Liability (12 hours)

Computation of total income; Deductions from gross total income under section 80 C to 80 U; Rebates and reliefs; Set-off and carry forward of losses (Concept only), Concept of advance payment of Tax and Deduction of Tax at Source. Computation of Taxable Income and liability of Tax. e-Filing of Returns: ITR-1 (SAHAJ) and ITR-2

Essential/recommended readings

1.   Ahuja, G. and Gupta, R. Simplified Approach to Income Tax. Flair Publications (P) Ltd.

2.   Singhania, V.K. and Singhania, M. Students Guide to Income Tax. Taxmann Publications (P) Ltd.

Software which will be used for teaching are

1. 'Excel Utility' available at incometaxindiaefiling.gov.in

2.   Vinod Kumar Singhania, e-filing of Income Tax Returns and Computation of Tax Taxmann Publication (P) Ltd, New Delhi. (Latest version)

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Entrepreneurship (DSE 3)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:
- To introduce the concept of entrepreneurship and its role in the economy
- To launch an Entrepreneurial Venture and writing a business plan
- To identify and explore legal and financial requirements of a business
- To understand the role and creativity in sustainable Business

Learning outcomes

By studying this course, the students will be able to:

· Develop critical thinking, problem solving skills and entrepreneurial mind-set in students.

· Enhance the understanding of the entrepreneurial process from idea generation, to concept development and creation of the venture.

· Enable the understanding of the business models, legal aspects of enterprise and writing a business plan.

· Apprise students with ways to finance and scale up the business.

SYLLABUS OF DSE-2

Unit 1: Introduction to Entrepreneurship   (9 hours)

Concept of Entrepreneurship; Attributes of Entrepreneur; Distinction between entrepreneur and manager; Concept of corporate entrepreneurship/ intrapreneurship; Concept of social entrepreneurship; Role of entrepreneurship for an economy; Understanding business model strategy; Legal forms of enterprise; case study discussion on entrepreneurs, intrapreneurs, business models

Unit 2: Launching Entrepreneurial Venture   (12 hours)

Identification of opportunities and Idea generation and screening methods- Brainstorming, mind-mapping, story-telling, SCAMPER, attribute listing, focus group interviews, customer

feedback; Feasibility studies- Marketing, Financial, Technical, Socio-economic Feasibility; Writing Business Plan

Unit 3: Legal and Financial Aspects (12 hours)

Legal requirements of business (Basic concept and relevance of patents, copyrights, and trademark); Financing- Start-up phase financing, growth stage financing, Maturity-phase financing; angel investment and venture capital, other forms of external financing; case study discussion on financing a venture

Unit 4: Sustaining and Scaling Up (12 hours)

Keeping the entrepreneurial spirit alive- Challenges and remedies, Role of creativity and innovation, Barriers to entrepreneurship, Concept of sustainability, Ethical Perspectives; Introducing Shared Innovation into the Business Model; Evolution of CSR from Compliance to Sustainable Entrepreneurship; How to Design CSR Strategies that Optimize Impact for Business and Society

Essential/recommended readings

·1.   Harvard Business Review Entrepreneur's Handbook: Everything You Need to Launch and Grow Your New Business

2.   Hisrich, R. D. International entrepreneurship: starting, developing, and managing a global venture. Sage Publications.

3.   Sharma, S., Starik, M., & Wuebker, R. Sustainability, innovation and entrepreneurship: introduction to the volume.

Additional References:

1.   Blank, S., Andreessen, M., Hoffman, R., & Sahlman, W. A. (2018). HBR's 10 Must Reads on Entrepreneurship and Startups (featuring Bonus Article "Why the Lean Startup Changes Everything" by Steve Blank). Harvard Business Press.

2.   Drucker, P. (2014). Innovation and entrepreneurship. Routledge.

3.   Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A.: Entrepreneurship, Tata McGraw Hill.

4.   Kuratko, D.F., and Rao, T. V., Entrepreneurship: A South-Asian Perspective, Cengage.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Investment and Portfolio Optimization (DSE 5)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at:

- Provides a broad overview of investment and risk associated with it
- Measurement and analysis of return and risk of an equity on the basis of fundamental and technical analysis
- Understand bond fundamentals and interest rate theories
- Construction, analysis and evaluation of a portfolio of securities.

Learning outcomes

By studying this course, the students will be able to:

· Provide a theoretical and practical background of investments valuation

· Do valuation of equity and debt instruments

· Analyse and manage the bond as well as equity portfolios in the real word.

· Understand how to measure the portfolio performances

SYLLABUS OF DSE-5

Unit 1: Basics of Investment (6 hours)

Investment alternatives and objectives, investment, gambling, speculation, introduction to risk – return trade off: types of risks, sources of risks, measures, analysis, determinants of required rates of return and relationship between risk and return. Types of returns: Holding Period Return (HPR) & Compound Annual Growth Rate (CAGR). Attributes of a good investment. Types of assets: Real Assets versus Financial Assets. Investment Process.

Unit 2: Analysis of Equity (12hours)

Measurement of return and risk of equity shares. Approaches to equity analysis, Fundamental Analysis- Economy, Industry, Company Analysis (EIC framework); Equity Valuation Models (DDM, P/E Ratio model and Free Cash Flow Valuation approach). Valuation based on other ratios-P/B ratio, Price to Sales ratio and Price to Cash flow ratio. Technical Analysis – Concept, market indicators and specific stock indicators.

Random Walk Theory & Efficient Market Hypothesis (EMH): Forms, empirical evidence and tests.

Unit 3: Analysis of Bonds   **(12hours)**

Bond fundamentals, types of bonds & risks in bonds. Valuation of bonds. Bond yields-current yield and Yield-to-maturity (YTM). Bond price-yield relationship, analysis of risks in bonds-duration and modified duration. Theories of term structure-Expectations theory, Segmented markets theory and Liquidity Preference theory. Yield curve.

Unit 4: Portfolio Construction, Management and Evaluation   **(15hours)**

Modern Portfolio theory: Diversification & portfolio risk, Harry Markowitz model, measurement of portfolio risk and return, measurement of co-movements in security returns, calculation of portfolio risk, efficient frontier and optimal risky portfolio. Riskless lending & borrowing and capital market line.
Capital Asset Pricing Model: Development of the CAPM, assumptions, beta and security market line. Sharpe's Single Index Model. Portfolio performance evaluation- Sharpe's index, Treynor's Index, Jensen's alpha, and Information ratio.
Note: Some case studies related to above topics are required to be discussed.

Essential/recommended readings

·1.   Bodie, Zvi., Kane Alex and Alan J. Marcus. Investments. McGraw Hill.

2.   Chandra, P. Security Analysis and Portfolio Management. Tata McGraw Hill.

3.   Francis. J.C. & Taylor, R.W. Theory and Problems of Investments. Schaum's Outline Series. TMH. New Delhi,

4.   Fischer, Donald E. and Ronald J. Jordan. Security Analysis and Portfolio Management. PHI Learning.

5.   Pandian, Punithavathy. Security Analysis and Portfolio Management. 2nd Edition. Vikas Publishing House. New Delhi

6.   Reilly, Frank K, and Brown, Keith C. Investment Analysis and Portfolio Management. Cengage Learning.

7.   Rustagi, R.P. Investment Management. Sultan Chand & Sons.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Monetary Economics (DSE 7)	4	3	1	0	Class 12	None

Learning Objectives

This course provides the student the knowledge of:
1. Forms of money and its measures and associated theories
2. Money and capital markets, Financial products, institutions and crises
3. Interest rates, their determination and associated theories
4. Structure and role of the banking system and its reforms
5. Monetary theory, monetary policy, its goals and current practice in India

Learning outcomes

By studying this course, the students will be able to:

·   Develop a critical understanding of functioning of financial institutions, markets and instruments and how growth of the real economy is interspersed with financial innovation and crisis.

·   Learn an important learning outcome relates to aspects with regard to banks and capital markets as they constitute significant components of a financial system.

·   Develop an understanding of theory of monetary policy and how it is conducted in India by Reserve Bank of India.

·   Develop some basic understanding of few current issues including demonetization, cryptocurrency and problems faced by the banking sector in their appropriate contexts.

SYLLABUS OF DSE-7

Unit 1:   **(8 hours)**

Concept, functions and measurement, and Theories of Money Supply Determination, Demonetization and Cryptocurrency.

Unit 2:   **(15 hours)**
Financial Institutions, Markets. Instruments and Financial innovation.
Role of Financial Markets and Institutions; problems of asymmetric information, adverse selection and moral hazard, financial crisis. Money and Capital Markets, Organization, Structure and Reforms in India: Role of Financial Derivatives and other Innovations.

Unit 3:   **(8 hours)**
Interest rates Determination, Sources of interest rate differentials, Theories of Term Structure of Interest rates, Interest rates in India.

Unit 4:   **(8 hours)**
Banking System, Balance Sheet and Portfolio Management, Indian Banking System, Changing role and Structure, Banking Sector Reforms.

Unit 5:   **(6 hours)**
Central Banking and Monetary Policy, Functions, Balance Sheet, Goals, Targets (operating, intermediate and final), Indicators and instruments of monetary control, Tinbergen's theorem, Inflation targeting, monetary management, current monetary policy in India.

Essential/recommended readings

·1.   Fabozzi F Jet al(2009): Foundations of Financial Markets and Institutions, Pearson

2.   MishkinF S , Eakins S G,Jayakumar T , Pattnaik R K (2017): Financial Markets and Institutions, Pearson.

3.   Dua, P(2020), "Monetary Policy Framework in India", Indian Economic Review, Vol. 55, Issue 1, June 2020

4.   Jadhav,Narender: Monetary Policy,Financial stability and Central Banking in India Macmillan,New Delhi,India

5.   Kaul,Vivek(2020) Bad money: inside the NPA Mess and how does it threaten the Indian Banking System, Harper Collin Publisher India

6.   Ghate, C., & Kletzer, K. M. (Eds.). (2016). Monetary policy in India: A modern macroeconomic perspective. Springer

7.   Chibber, Ajay, Salman, Soz, Anees(2021) India's Financial Sector: A Whodunnit

8.   EDs in Unshackling India. Haper Collins Publishers India.

9.   Report of the Working Group: Money Supply Analytics and Methodology of Compilation, 1998 Annual Report; Master Circular - Prudential Norms on Capital Adequacy - Basel I Framework – 2011; RBI Bulletin; Report of Currency and Finance (latest).

10.   Various publications of RBI and other agencies / institutions

11.   Raghuram_Rajan_Committee_on_Financial_Sector_Reforms

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DISCIPLINE SPECIFIC ELECTIVE COURSE 9 (DSE-9): International Economics

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Economics (DSE 9)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:
- To explain ancient view of International trade and production and consumption gains from trade
- To analyse the working of H-O theory and new trade theory
- To understand the international trade policies and its impact on trade
- To Understand the functioning of WTO and its implications for India.

Learning outcomes

By studying this course, the students will be able to:

- Understand basic theories of International Trade and the terms used therein.

- Understand trade policies and instruments used to control international trade.

- Understand what is WTO and how does it affect international trade?

- Understand various concepts related to Regionalism and Integration and their importance.

SYLLABUS OF DSE-9

Unit 1: International Trade Theories (12 hours)

International trade as an Engine of Growth, Ancient view of International Trade, Theory of Mercantilism, Absolute Advantage theory, Comparative Advantage Theory, Opportunity cost theory of trade, Autarky Equilibrium, Production and Consumption Gains from Trade.

Unit 2: Modern Theories of Trade (12 hours)

Introduction, H-O theory- Assumptions, General Equilibrium framework, the working of H-O theory, Factor price equilibrium theorem, Income Distribution effects of H-O theory, Empirical implications of H-O theory, Leontief Paradox, Factor Intensity Reversal, New trade theories (Difference in technology, Economies of Scale and Monopolistic Competition and Trade)

Unit 3: International Trade Policies and Practices (12 hours)

Trade Policy Instruments, Tariffs Barriers, Import Tariff- It's effect and measurement, Non-Tariff Barriers- Import Quotas, Voluntary Export Restraints, Anti-Dumping, Economic Integrations, Regional groups – EU, NAFTA and SAARC/ ASEAN, Theory of Customs Union - Impact of customs union on trade- trade creation and diversion. Import Substitution and Export Promotion.

Unit 4: WTO and Trade **(9 hours)**

What is WTO, Objectives, Principles, Areas of Function of WTO, Role of WTO in trade, Foreign Trade Policy of India, The Sanitary and Phyto SanitaryAgreement (SPS) of WTO and Its Implications for India, India & World Trade Organization (WTO): WTO Agreement on Agriculture.

Essential/recommended readings

·1.   Salvatore, D. (Edition 2008) , International Economics, Pearson Education : New Delhi

2.   Krugman Paul R. & Obstfeld M. (2013) : International Economics:- Theory and Policy (IXth Edition), Pearson Education , New Delhi.

3.   Cherunilam Francis (1998) :International Economics (Vth Edition), McGraw Hill Education (India) Pvt Ltd.

4.   WTO and its implications on Indian Agriculture, National Institute of Agricultural Extension Management (MANAGE), Hyderabad.

Additional References:

1.   Appleyard   Dennis R.; Cobb Steven; Field Alfred J. (2010). International Economics (Vth Edition), McGraw Hill Education (India) Pvt Ltd.

2.   Thompson, Henry(2010): International Economics – Global markets and competition 2nd Edition Singapore; Hachensack, N.J: World Scientific.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Understanding Consumers (DSE 11)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:
- To understand psyche of a consumer and his personality traits
- To apply theories to learn and predict consumer behaviour
- To learn culture role and dynamics of Family and Consumer socialization
- To analyse consumer decision making process and diffusion of innovation

Learning outcomes

By studying this course, the students will be able to:

- Understand personality theories and their applications to consumer psychology.

- Analyse consumer perception in advertising through psychology based theories of perception.

- Understand behavioural learning theories and consumer attitude formation in the context of advertisements.

- Understand the role of opinion leaders, family and culture in consumer decisions.

- Identify the use of consumer behaviour concepts in prevalent advertisements.

SYLLABUS OF DSE-11

Unit 1: Personality, Perception and Positioning   (12 hours)

Freudian Theory, Neo-Freudian theory of personality; Personality traits; Anthropomorphism; Self-Perception; Sensory information, Absolute and differential thresholds; Perceptual Selection, Perceptual Organisation, Interpretation of cues and imagery, Risk perception; Positioning and Repositioning (including use of perceptual mapping).

Unit 2. Consumer Learning and Attitude   (12hours)

Elements, Behavioural learning theories (Classical, Instrumental, Observational); Information processing; Cognitive learning theory, Consumer involvement and hemispheric lateralisation; Recognition and recall measures. Consumer attitude formation; Tri-

component attitude model; Attitudes motivational functions; Elaboration Likelihood Model; Cognitive dissonance and conflict resolution; Causality and attribution theory.

Unit 3. Persuasion, Social Setting and Culture   **(9hours)**

Broadcasted versus Addressable messages, message structure, persuasive appeals; Credibility and persuasive power of reference groups, Opinion leaders (influencers), Word-of-mouth strategic applications
Family and consumer Socialization; family decision making and members' roles; Culture's role and dynamics; Learning Cultural Values; Measuring values; Core values.

Unit 4. Consumer Decision-Making and Diffusion of Innovations   **(12 hours)**

Consumer decision making: need recognition, decision spectrum, pre-purchase search, evaluation, decision rules, rules and marketing strategy, incomplete information, post-purchase evaluation- brand loyalty, disconfirmation of expectations; Consumer gifting behaviour; Diffusion, Types of innovation, Features affecting adoption, Adoption process.

Essential/recommended readings

·1.   Schiffman, Leon G., Kanuk, Leslie Lazar.,Kumar, S. Ramesh. Consumer Behaviour. 12th ed. Pearson Publications.

Additional References:

1.   Hawkins, Roger J., Best, Kenneth A., Coney. Consumer Behaviour: Building Marketing Startegy. Tata McgrawHill.

2.   Solomon, Michael. Consumer Behaviour: Buying, Having and Being. 12th ed. Pearson Publications.

3.   Nair, Suja. Consumer Behaviour in Indian Perspective. Himalaya Publications.

4.   Kumar, S Ramesh. Conceptual Issues in Consumer Behaviour. Pearson Publication.

5.   Sheth, Jagdish N., Mittal, Banwari. Customer Behaviour: A Managerial Perspective. Thomson Publication.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

GENERIC ELECTIVES (GE-1): PRINCIPLES OF ECONOMICS

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Principles of Economics (GE 1)	4	3	1	0	Class 12	None

Learning Objectives
This course aims
- To offer basic understanding of the basic principles of micro economics like problem of scarcity and choice, demand and supply, elasticity.
- To introduce students with basic consumer theory,
- To introduce students with production and cost concept
- to expose the student to the basic principles and concepts in Macroeconomic variables -- GDP, consumption, savings, investment, money and credit etc.
- To learn measurement of national income and related aggregates; nominal and real income
- To determine actual and potential GDP
- To understand the functioning of money market

Learning outcomes
By studying this course, students will be able to:

· Understand the principles of economics of the modern economy.
· Understand the consumer theory, production, and costs etc.
· Understand the basic principles of macroeconomics, national income accounting and determination of GDP.
· Understand the functioning of the money market.

SYLLABUS OF GE-1

Unit 1: Introduction   (6 hours)

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.

Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.

Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.

Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

Unit 2: Consumer Theory   **(9 hours)**

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Costs   **(9 hours)**

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.

Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

Unit 4: Introduction to Macroeconomics   **(6 hours)**

What is macroeconomics, Macroeconomic issues in an economy.

Unit 5: National Income Accounting   **(6 hours)**

Concepts of GDP Aggregates and National Income; measurement of national income and related aggregates; nominal and real income; GDP and welfare and the limitations of the GDP concept.

Unit 6: Determination of GDP   **(6 hours)**

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

Unit 7: **Money and Credit**   **(3 hours)**

Money in a Modern Economy: Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy

Essential/recommended readings

1.   Case, K.E., Fair, R. C., and Oster, S. E. (2017). Principles of Economics (12th Ed.). Pearson.

2.   Dornbusch, R., Fischer, S. and Startz. R. Macroeconomics (11th Edition). McGraw-Hill.

3.   Mankiw, N.G. (2021). Principles of Economics, (9th Edition). Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Legal Environment of Business (GE 3)	4	3	1	0	Class 12	None

Learning Objectives

The course intends:
- To familiarize the student with the concept and essentials of Indian Contract act which govern business for its efficient conduct and to apply them in real life situations.
- To explain the meaning, nature and incorporation of a company.
- To make students understand and apply the provisions of Sale of Goods Act and Consumer Protection Act.
- To recognize and articulate legal principles related to Limited Liability Partnership and Information Technology Act.

Learning outcomes

By studying this course, students will be able to:

· Understand the basic rules and provisions of Contract and Agreements.

· Know the provisions to Formation and functioning of company and LLP.

· Understand the significance and role of law of sale of goods act

· Apply the law correctly to different facts and in different contexts

SYLLABUS OF GE-3

Unit 1: Indian Contract Act   (12 hours)

Meaning and Essentials of a Contract; Valid, Void and Voidable Contract; Offer and Acceptance; Consideration; Capacity of Parties; Free Consent; Discharge of Contract and Remedies for Breach of a Contract.

Unit 2: Companies Act   (12 hours)

Meaning and Nature of Company; Promotion and Incorporation of a Company; Memorandum of Association; Articles of Association; Misleading Prospectus and remedies available to the parties; Board of Directors and their qualification, duties, powers. Company Meetings and Resolutions.

Unit 3: Sale of Goods Act and Consumer Protection Act   (12 hours)

Essentials of a Contract of Sale; Sale and Agreement to Sell, Conditions and Warranties; Transfer of Title by Non-Owners; Doctrine of Caveat Emptor; Rights of Unpaid Seller. Consumer Protection Act 2009: Scope and Applicability of the Act. Rights of consumer. Procedure for complaints. Duties and power of Central Consumer Protection Authority.

Unit 4: Limited Liability Partnership Act and IT Act   (9 hours)

Meaning and nature of LLP; LLP and Company; LLP Agreement, Partners and Designated Partners, Incorporation of LLP; Partners and their Relations, Extent and limitation of liability of LLP.

Information Technology Act 2000: Concept and role; Digital signature, Electronic governance, Attribution, Acknowledgement and dispatch of electronic records, Regulation of certifying authorities, Digital signatures certificates, Duties of subscribers, Penalties and adjudication, Appellate Tribunal, Offences.

Essential/recommended readings

1. Bansal, V & Arora, A. Corporate Laws. Vikas Publishing, House (P) Ltd. New Delhi.

2. Kuchhal M.C & Vivek K. Business Legislation for Management. VIKAS Publishing House (P) Ltd.

3. Kumar, A. Corporate Laws. International Book House (P) Ltd.

4. Bare Acts relating to the laws.

Suggestive readings

1. Chadha, R,. Chadha, S. Corporate Laws. Mayur Paperbacks. New Delhi.

2. Maheshwari & Maheshwari. Business Law. National Publishing House. New Delhi.

3. Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company. Lucknow.

4. Tulsian, P.C. Business Law. Tata McGraw Hill. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-5): QUANTITATIVE TECHNIQUES IN MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Total Hours of Teaching	Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice			
Quantitative Techniques in Management (GE 5)	4	3	1	0	45	Class 12	None

Learning Objectives

To apprise students:
- To understand the concepts, formulation and interpretation of linear programming methods and its application in diverse problems.
- To formulate and solve Transportation and Assignment problems
- To understand basic concept, construction of the Network diagram and Critical Path Analysis
- To introduce game theory and network analysis forms part of the course.

Learning outcomes

By studying this course, students will be able to:

- Identify and develop operational research models from the verbal description of the real system.
- Understand the mathematical tools that are needed to solve optimization problems.
- Develop critical thinking and use PERT and CPM techniques to improve decision making.

SYLLABUS OF GE-5

UNIT – I: Introduction - Operations Research, Linear Programming   (15 hours)
(i)   Introduction to Operations Research, characteristics, Phases, Methodology, Applications and scope
(ii)   Formulation of Linear Programming problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution); Simplex Method, Special cases, Big-M method and Two-phase method; Duality (emphasis on formulation & economic interpretation); Sensitivity Analysis. (Excel Solver application)

UNIT – II: Transportation and Assignment Problem   (12 hours)
(i)   Transportation Problem: Formulation, Solution by N.W. Corner Rule, Least Cost method, Vogel's Approximation Method (VAM), Modified Distribution Method; Special cases: Multiple Solutions, Maximization case, unbalanced case, prohibited routes.
(ii)   Assignment Problem: Hungarian Method, Special cases: Multiple Solutions, Maximization case, Unbalanced case, Restrictions on assignment.

UNIT – III: Network Analysis   (9 hours)

Basic Concept, Construction of the Network diagram, Critical Path Analysis, float and slack analysis (Total float, free float, independent float), probability consideration in PERT (Interface with Project Management open-source software)

UNIT – IV: Decision Theory: (9 hours)

Decision making environment, Construction of Pay off Table, Opportunity Loss Table, Decision under uncertainty. Decision under Conflict: Game Theory, Two-person Zero-Sum games, Maximin Minimax Principle, Games without Saddle point - Mixed strategy, Dominance Rule.

Essential/recommended readings

1. Vohra, N.D., Quantitative Techniques in Management (5th ed.). Tata McGraw Hill

2. Swarup, K., Gupta, P.K. and Mohan, Man, Introduction to Management Science Operations Research (19th ed.). Sultan Chand & Sons.

3. Sharma, J.K., Operations Research: Theory and Applications (6th ed.). Trinity.

4. Taha, H.A., Operations Research: An Introduction (9th ed.). Pearson.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-7): ECONOMICS OF STARTUPS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Economics of Startups (GE 7)	4	3	1	0	Class 12	None

Learning Objectives

To apprise students:
- To give an overview of startups and its types that would help students to understand basics of starting up new ventures.
- To build and create a successful Business Plan
- To understand various Business models and learn startups
- To familiarize with central and state level institutions supporting small business entreprises.

Learning outcomes

By studying this course, students will be able to:

- ∴ Understand the process and working of a startup.

- · Identify the different ways in which entrepreneurs manifest in start-ups.

- · Know how to create one's own business venture and the various factors that influence successful set-up and sustainable operations.

- · Explore the funding and other institutions supporting small business units.

SYLLABUS OF GE-7

UNIT – I: Startup, Generation & Experimentation (9 hours)
Concept of Startup, Role of digital technologies, Startup ecosystems, the startup movement in India; Generating a value proposition, how valuable are new ideas, Design thinking principles; Experimenting with the prototype, Introduction to lean start-ups, Lean startup principles, Learning and failing fast.

UNIT – II: Building the Business Plan (15 hours)
Beginning Considerations: Building a competitive advantage. The strategic management processes. Conducting a feasibility analysis. Forms of Business ownership. Franchising and entrepreneurship. Buying an existing business, marketing and financial considerations: Building a powerful marketing plan. E-commerce and Entrepreneur. Pricing strategies. Creating a successful financial plan. Choosing the right location and layout.

UNIT – III: Crafting business models and Lean Start-ups (12 hours)

Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analysing business models; Business model canvas, Business Pitching.

UNIT – IV: Institutions Supporting Small Business Enterprises and Ethics (9 hours)
Central level institutions. State level institutions. Other agencies. Industry Associations. Class exercise- discussions on current government schemes supporting entrepreneurship and finding out which scheme will most suit the business plan devised by the student. Importance of Ethical Entrepreneurship, value of ethics to an entrepreneur.

Essential/recommended readings

1. Scarborough, N. M., Cornwall, J. R., & Zimmerer, T. (2016). Essentials of entrepreneurship and small business management. Boston. Pearson Publications.

2. Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A., Entrepreneurship, Tata McGraw Hill.

3. Shukla, M.B., Entrepreneurship and Small Business Management. Kitab Mahal Publishers.

Suggestive readings

1. Hishrich, R.D. and Peters, M. Entrepreneurship. Irwin Publications.

2. Barringer, B.R. and Ireland, R. Duane. Entrepreneurship: Successfully launching new ventures. (6th Edition) Pearson

3. Kuratko, D.F., and Rao, T.V., Entrepreneurship: A South-Asian Perspective. Cengage Publications.

4. Shankar, R., Entrepreneurship: Theory and Practice. Tata McGraw Hill.

5. Kathleen, R Allen. Launching New Ventures: An Entrepreneurial Approach. Cengage Learning.

6. Fisher, Steve and Duane, Ja-Nae. The Startup Equation - A Visual Guidebook for Building Your Startup. Mc Graw Hill Education India Pvt. Ltd.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Economics (GE9)	4	3	1	0	Class XII	NA

Learning Objectives

This course aims at inculcating:
- Basic understanding of fundamentals of international Trade
- An overview of theories of international trade
- Understand the meaning of Balance of Payment and explore the reasons of disequilibrium.
- Determine exchange rates and understand global capital market

Learning outcomes

By studying this course, students will be able to:

- To understand basic concept and origin of International economics through the prism of classical and new classical trade theories

- To understand different terms of trade and their applicability

- To differentiate between Modern and Classical Trade theories.

- To gain knowledge about the foreign exchange markets and its working

- To learn about global capital market

SYLLABUS OF GE-9

UNIT – I: Introduction to International Trade   [12hours]

Globalization and its growing importance in the world economy; Impact of globalization; International business contrasted with domestic businesses; Cost and benefit analysis of tariff, Effective rate of protection and welfare arguments of tariff and developing countries. Foreign direct investment (FDI) in world economy: Trends, Direction, and flow of FDI; Theories of FDI; Political ideology and FDI.

Unit 2: International Trade Theory   [15hours]

World Trade: An overview; Theories of international trade – Mercantilism; Absolute advantage theory, Comparative advantage theory, Factory proportion theory and Leontief paradox, Product life cycle theory, New trade theory, National competitive advantage:

Porter's diamond. International Business Environment: Economic, Demographic, Cultural and Political-legal environment.

Unit 3: Balance of Payment (BoP) [6hours]

Balance of Payment: Meaning, Components (Current, Capital and Official reserve), Reasons for disequilibrium in BoP, Measures to correct disequilibrium, Understanding India's BoP and comparing it with markets like USA and China.

Unit 4: Foreign Exchange and Global Capital Market [12hours]

Exchange Rate Determination: Currency Demand and Supply Curves, Factors Affecting Exchange Rate, Global Capital Market: Introduction, Benefits of global capital market, Growth of global capital market, Global capital market risk, Eurocurrency market, Global bond market, Global equity market, Exchange rate risk, Managing exchange rate risk, Methods of Financing International Trade.

Essential/recommended readings

1. Hill, C. (2021). International business: Competing in the global market place (13th Edition). *Strategic Direction*.

2. Krugman, P. R., & Obstfeld, M. (2009). International economics: Theory and policy. Pearson Education.

3. Levi, M.D. (2009). *International Finance* (5th Edition), Taylor and Francis Ltd.

4. Madura, J. (2020). *International financial management*. Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Economic Policy Framework (GE11)	4	3	1	0	Class 12	None

Learning Objectives

This course will help students
- to understand the importance, meaning and objective of macroeconomic policies
- to understand role and effect of fiscal policy and government expenditure
- to explore role of monetary policy and banking sector in India
- to analyse efficacy of fiscal/monetary policy under fixed and flexible exchange rate

Learning outcomes

By studying this course, students will be able to:

∴   Learn the basic concept of macroeconomics

·   Understand how different parameters of macroeconomics work under Indian economy.

·   Understand how monetary and fiscal policy works.

·   Know different exchange rate regimes.

SYLLABUS OF GE-11

UNIT – I: Meaning and objectives of economic policy (8 hours)

Tools and goals (objectives and instruments of policy) Circular flow of income (start with a two sector model and go up to a five sector model); National Income aggregates and the related concepts of national income; input-output table to calculate national income using the income, expenditure and the value added methods.

Unit 2: Fiscal policy (15 hours)

Objectives and meaning; effect of fiscal policy - role of tax policy (T) and government expenditure (G), Aggregate Demand, Meaning of the multiplier. Government expenditure multiplier and balanced budget multiplier Budget –meaning and purpose – example of India's latest Budget (and various heads). Meaning of fiscal, revenue and primary deficits.

Unit 3: Monetary policy (12 hours)

Meaning and objectives; money and credit – credit creation and instruments of credit control; Inflation targeting, Banking in India – structure, recent developments; issues of NPAs and how to resolve it.

Unit 4: Exchange rate policy (10 hours)

Structure of BOP; meaning of current account deficit and trade deficit; exchange rate definition (real and nominal); fixed vs flexible exchange rate, efficacy of fiscal/monetary policy under fixed and flexible exchange rate , effect of a change in exchange rate on the current account (imports and exports); structure of capital account and role of capital outflows and inflows.

Essential/recommended readings

1Gupta G.S (2016), Macroeconomics - Theory and Applications (4th edition). McGraw Hill,

2. Shapiro, Edward (1982), Macroeconomic Theory, 5th edition

3. Mankiw, Gregory N. (2010), Macroeconomics (7th edition), Worth Publishers.

4. Sikdar, Soumyen (2011), Principles of Macroeconomics, Oxford University Press

5. Krugman, P.R., Obstfeld, M. and Melitz, M. (2015). International Economics: Theory and Policy, Pearson Education Limited.

6. Dua, P. (2020). Monetary Policy Framework in India, Indian Economic Review, 55(1), June 2020, pp. 117-154.

9. http://www.inclusivejournal.in/about.html.

10. Sengupta, R. and Vardhan, H., Non-Performing Assets in Indian Banks, Economic and Political Weekly, 52(12) March 25, 2017, Money, Banking and Finance Special.

11. Economic Survey, India, latest issue

12. Union Budget Statement, India, Latest issue

Suggestive readings

1Abel, Andrew, Bernanke, Ben and Croushore, Dean (2011). Macroeconomics (7th edition). Pearson

2.   Ghate, C., & Kletzer, K. M. (eds.) (2016). Monetary policy in India: A modern macroeconomic perspective. Springer.

3.   Kaul, Vivek (2020) Bad Money: Inside the NPA Mess and how it threatens the Indian Banking System, Harper Collins Publisher India.

4.   Chhibber, Ajay and Anees, Salman Soz (2021) India's Financial Sector: A Whodunnit. In Unshackling India. Haper Collins Publishers India.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

SEMESTER VI

DISCIPLINE SPECIFIC CORE COURSE – 16 (DSC-16): OPERATIONS RESEARCH

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical		
Operations Research (DSC 16)	4	3	0	1	Class 12	None

Learning Objectives

The course intends to develop an understanding of:

(i) linear programming problems and their methods of solution

(ii) transportation and assignment problems, theory for solution and software methods

(iii) network analysis, Markov chains and applications

(iii) a decision making environment and theory of games

Learning outcomes

By studying this course, the students will be able to:

· Identify and develop operational research models from the verbal description of the real system.

· Understand the mathematical tools that are needed to solve optimization problems.

· Use mathematical software to solve the proposed models

· Develop critical thinking and use PERT and CPM techniques to improve decision making.

SYLLABUS OF DSC-16

UNIT–I: Introduction - Operations Research, Linear Programming, Integer Programming
(15 hours)

(i) Introduction to Operations Research, characteristics, Phases, Methodology, Applications and scope

(ii) Formulation of Linear Programming problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution); Simplex Method, Special cases, Big-M method and Two-phase method; Duality (emphasis on formulation & economic interpretation); Sensitivity Analysis. (Excel Solver application)

(iii) Integer programming problem: Formulation, Solution through Gomory's Cut Method, managerial applications.

Unit 2: Transportation and Assignment Problem **(9 hours)**

(i)   Transportation Problem: Formulation, Solution by N.W. Corner Rule, Least Cost method, Vogel's Approximation Method (VAM), Modified Distribution Method; Special cases: Multiple Solutions, Maximization case, unbalanced case, prohibited routes. (Excel Solver application)
(ii)   Assignment Problem: Hungarian Method, Special cases: Multiple Solutions, Maximization case, Unbalanced case, Restrictions on assignment. (Excel solver application)

Unit 3: Network and Markov Analysis   (12 hours)

(i)   Network Analysis: Basic Concept, Construction of the Network diagram, Critical Path Analysis, float and slack analysis (Total float, free float, independent float), probability consideration in PERT (Interface with Project Management open-source software)
(ii)   Markov Analysis: Assumptions of Markov analysis, construction of matrix of transition probabilities, brand switching analysis, vector of state probabilities, prediction of future market share, equilibrium conditions.

Unit 4: Decision Theory: (9 hours)

(i)   Decision making environment, Construction of Pay off Table, Opportunity Loss Table, Decision under uncertainty, Decision under Risk: EMV, EOL, EVPI.
(ii)   Decision under Conflict: Game Theory, Two-person Zero-Sum games, Maximin Minimax Principle, Games without Saddle point- Mixed strategy, Dominance Rule; Reduction of m x n game. (Application of Excel Solver)

  Practical Component (30 Hours) : Practicals based on spreadsheet package (Microsoft Excel or equivalent) to enable students to apply all the concepts taken up in the theory classes in the course.
Essential/recommended readings

1.   Vohra, N.D, Quantitative Techniques in Management, 5th ed., Tata McGraw Hill.

2.   Gupta ManMohan, SwarupKanti, Introduction to Management Science Operations Research, 19th ed. Sultan Chand & Sons.

3.   Sharma J.K., Operations Research: Theory and Applications, 6th ed. Trinity.

4.   TahahamdyA.,Operations Research: An Introduction, 9th ed., Pearson.

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DISCIPLINE SPECIFIC CORE COURSE – 17 (DSC-17): Business Legislation in India

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite for the course
		Lecture	Tutorial	Practical	Class 12	None
Business Legislation in India (DSC 17)	4	3	1	0		

Learning Objectives

The course intends to inform and develop an understanding of:

1. The Indian Contract Act, 1872
2. The Sale of Goods Act, 1930
3. The Companies Act, 2013
4. The Intellectual Property Act, Competition Act and Consumer Protection Act

Learning outcomes

By studying this course, the students will able to:

· Understand the fundamentals of the various legislations for conducting business.

· Able to understand and appreciate the need for different legislations and the amendments thereof.

· Enable the student to initiate their own ventures in the form of entrepreneurs, and Company.

· Relate the legal framework with recent cases in the business world so as to have better understanding of their interpretations.

SYLLABUS OF DSC-17

UNIT – I: Indian Contract Act 1872   **(15 hours)**

Definition: Essential elements and Kinds of Contracts. Offer and Acceptance: legal rules, lapse and revocation. Consideration: Definition, Essentials and Exceptions. Capacity of Parties: Minor's agreements, Persons of unsound mind and Disqualified persons. Free Consent: Coercion, Undue Influence, Misrepresentation, fraud and Mistake. Discharge of a Contract and its various ways.Kinds of Remedies for Breach of a Contract.

Unit 2: The Sale of Goods Act 1930   **(8 hours)**

Contract of Sale of Good: Definition and Essentials: Sale and agreement to sell distinguished: Kinds of Goods and concept of price. Conditions and Warranties.Doctrine of caveat emptor and exceptions. Transfer of Property: Concept and Rules. Rights of Unpaid Seller against the goods and buyer.

Unit 3: The Companies Act 2013   **(15 hours)**

The Company: Definition and Characteristics. Kinds of Companies: On the basis of incorporation and liability of Members. Concept of One Person Company.Difference between Public and Private Company.Formation of a company–promotion, incorporation, on-line registration, commencement of business.Memorandum of Association.Articles of Association. Prospectus: Definition, Issue and Contents. Misleading prospectus and its consequences including remedies. Company Management: Definition of Directors, Legal Position of Directors, Number of Directors and Directorship, Qualification and Disqualification, Appointment and Removal, Powers and Duties of Directors.

Meetings and Resolutions: Types: AGM and EGM, Legal provisions, Requisites of a valid meeting, Voting, Proxy, Resolutions and its types, Minutes. Winding up of a Company – Meaning, Winding up and Dissolution distinguished, Modes and Consequences of Winding Up.

Unit 4: Laws of Intellectual Property, Competition and Consumer Protection   (7 hours)

Intellectual Property Act: Patent Act, 1970: Meaning and Types. Patentable and Non- Patentable Inventions.Procedure for obtaining a patent. Trade Marks Act, 1999: Essentials and Definition. Conditions for Registration of Trade Marks. Design Act, 2000: Concept and Registration of Designs. Copyright in Registered Designs.General Provisions relating to design under the Act.
Competition Act 2002: Scope and applicability of the Act. Prohibition of Anti- Competitive agreement and abuse of dominant position. Regulation of Combinations. Duties, Powers and Functions of Competition Commission of India
Consumer Protection Act 2009: Scope and Applicability of the Act. Rights of consumer.Procedure for complaints.Duties and power of Central Consumer Protection Authority.

Essential/recommended readings
1Bansal V and Arora, A. Corporate Laws. Vikas Publishing, House (P) Ltd. New Delhi.

2.   Chadha, R. Chadha, S. Corporate Laws. Mayur Paperbacks. New Delhi.

3.   Kuchhal M.C &Vivek K. Business Legislation for Management. VIKAS Publishing House (P) Ltd.

4.   Kumar, A. Corporate Laws. International Book House (P) Ltd.

5.   Bare Acts relating to the laws.

Suggestive readings
1   Arora, S. Business Laws. New Delhi. Vikas Publishing House.

2.   Gulsan, S.S. Business Laws. Excel Books.

3.   Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company. Lucknow.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Environmental Economics (DSC 18)	4	3	1	0	Class 12	None

Learning Objectives

The course intends to develop an understanding of:

(i) the concept of sustainability and economy-environment interaction

(ii) public policies to control environmental damage and pollution

(iii) the use of risk and cost-benefit analysis for environmental conservation

(iv) global environmental concerns and their protocols

Learning outcomes

By studying this course, students will be able to:

·   Provide the basic understanding interaction between environment and economic activities

·   Understand sustainability

·   Analyse different tools of environmental policies

·   Understand global policies for environment

SYLLABUS OF DSC-18

UNIT – I: Environment and Sustainability   **(9 hours)**

An Introduction to Environmental Economics; Economy–Environment interdependence, materials balance model of economy–environment interactions, the drivers of environmental Impact, Environmental Kuznets Curve Hypothesis. Concepts of sustainability: The Hartwick rule, Weak and strong sustainability, Resilience.

Unit 2: Environmental Policies   **(12 hours)**

Conventional Policy: Environmental Standards, Efficiency of Environmental Standards, Command and Control Approach. Market Based Policy - Pollution Charges and Environmental Subsidies. Deposit Refund System. Pollution Permit Trading Systems.

Unit 3: Environmental Planning & Analytical Tools   **(12 hours)**

Environmental Risk Analysis - Concept of Risk. Risk Assessment and Risk Management
Assessing Benefits for Environmental Decision Making - Environmental Benefits - Conceptual Issues.
Approaches to Measuring Environmental Benefits - Physical Linkage Approach, Behavioral Linkage
Approach -Direct and Indirect Estimation Methods, Benefit -Cost Analysis

Unit 4: Global Environmental Management and Regulations   **(12hours)**

Ozone depletion, Climate change, International collaborations for environment, Montreal and Kyoto protocol, Paris agreement

Essential/recommended readings

1.   Perman Roger, MaYue, McGilvray James and Common Michael. (2003) Natural Resource and Environmental Economics. Financial Times/ Prentice Hall.

2.   Thomas Janet M., Callan Scott J.. (2012) Environmental Economics and Management: Theory, Policy, and Applications. South-Western College Publishing.

3.   Kolstad Charles. (2012). Intermediate Environmental Economics.Oxford University Press

4.   Hanley Nick, Shogren Jason F.and White Ben. (2006). Environmental Economics in Theory and Practice.Palgrave Macmillan

Suggestive readings

1.   Henley, Nick and Roberts, Colin Ed. (2002). Issues in Environmental Economics. Wiley-Blackwell

2.   Lenschow, Andrea and Lenschow Ed. (2001). Environmental Policy Integration.Routledge.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Public Finance (DSE2)	4	3	1	0	Class 12	None

Learning Objectives

The course intends to develop and understanding of:
(i) scope and importance of public finance, its sources and expenditures
(ii) Evolution of the Indian tax system and current debates
(iii) Finance Commissions and their changing role
(iv) Canons of taxation and relevance to public revenues

Learning outcomes

By studying this course, the students will be able to:

- Apply tools of basic microeconomics to key policy issues relating to the spending, taxing and financing activities of the Government.

- Understand difference in impact of direct and indirect taxation.

- Understand the recent developments and issues in Indian Public Finance.

SYLLABUS OF DSE-2

Unit 1: Theory of Public Finance (12 hours)

Public finance: Meaning, nature, scope and importance, difference between private and public finance. Principle of maximum social advantage. Role of state in public finance.
Elementary theory of product and factor taxation
Sources of revenue: taxes, loans, grants and aid – meaning and types, Principle of public expenditure. Public finance and the economic system.

Unit 2: Current Issues in India Tax System (12hours)

Direct and Indirect Tax Reform in India, Different forms of direct tax in India,
Changing regime of taxation-direct to indirect taxation,
Introduction of GST and its implication for state finances and fiscal federalism in India, Latest finance commission and its recommendation for fiscal devolution.

Unit 3: Center State Financial Relations (9hours)

Center state fiscal relations, horizontal and vertical tax devolution in India,
State and local finance in India
Performance and Equity debate in fiscal devolution in India
Report of finance commission in post liberalisation period

Unit 4: Principles of Taxation (12 hours)

Canons of taxation, Meaning of Canons of Taxation -Types of Canons of Taxation-Canon of equality or equity, Canon of certainty, Canon of economy, Canon of productivity, Canon of Diversity, Canon of convenience, Canon of elasticity, Canon of simplicity, Canon of diversity, Characteristics of Canons of Taxation.

Essential/recommended readings

1   Musgrave, R. A. and Musgrave, P.B., Public Finance in Theory and Practice (1989), 5th edition. McGraw Hill Education.

2.   Bagchi, Amaresh. Reading in Public Finance, Oxford University Press.

3.   Bhatia H.L.. Public Finance. Vikas Publishing House;

4.   Shankar Acharya, Thirty years of Tax Reforms in India, EPW, May 2005

5.   Rao, M. Govinda, "Central transfers to states in India: rewarding performance while ensuring equity." Final report submitted to NITI Aayog (2017) (pages 1 to 18).

6.   Government of India, Fifteenth Finance Commission Report 2021-26, Chapter 6

Suggestive readings
1.   Report of Finance commission of India, Various years.

2.   Economic Survey, GoI, Various year

3.   State Finances: - A Study of Budget, RBI, Latest report

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Advertising Management (DSE 4)	4	3	1	0	Class 12	None

Learning Objectives

The course attempts to develop an understanding of :
(i) Advertising, its role, functions, agencies and budgets
(ii) Marketing and advertising plans in a firm's strategy
(iii) Execution of advertising plan and assessing its effectiveness
(iv) Different Media, their cost and options available for effective outcomes

Learning outcomes

By studying this course, the students will be able to:

· Understand the role played by advertising agencies.

· Recognise and identify the facet model objectives in any advertisement.

· Conduct situation analysis and consumer insight mining.

· Learn creative execution strategies including application of appeals, layouts and creative copywriting.

· Understand and conduct appropriate media mix selection.

SYLLABUS OF DSE-4

Unit 1: Foundations of Advertising   (10 hours)

Concept of advertising, Types of advertising, Concept of IMC, Role and functions of Advertising, the key players, functions of advertising agencies, Organisation of agency, Advertising appropriateness-factors influencing advertising budgets, methods of setting advertising budgets.

Unit 2: Planning and Strategy   (13 hours)

Planning Framework-marketing and advertising plan, Facet model of objectives (Perception, Cognition, Affect, Association, Action), DAGMAR, Marketing strategy and situation analysis, consumer insight mining, big idea, positioning for advertising campaigns.

Unit 3: Effective Advertising Execution   (12hours)

The creative and message strategy, creative brief, themes and appeals, execution styles, message format, message tone, copywriting creativity, body copy, visual layouts, evaluation of effectiveness, pre-testing, post-testing.

Unit 4: Effective Advertising Media   (10 hours)

Types of media, newer media options, media objectives, developing a media plan, media Plan budget, media mix selection.

Essential/recommended readings

·1.   Belch,G.E., Michael, A., Keyoor, Purani. Advertising and Promotion-An Integrated Maketing Communications. 12th edition. Tata McGraw Hill Education. 2021.

2.   William Wells, Sandra Moriarty, and John Burnett. Advertising: Principles and Practice. Prenctice Hall of India. 2007.

3.   Jethwaney, Jaishri., Jain, Shruti. Advertising Management. Oxford University press.

4.   Shah, Kruti. Advertising and Integrated Marketing Communications. McGraw Hill Education India. 2014.

5.   Aaker, David A., Batra, Rajeev., Myers, John G. Advertising Management. Pearson Education. 2006.

6.   Shimp, T.A. .Advertising and Promotion: An IMC Approach. Cengage. 2013.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Financial Management (DSE 6)	4	3	1	0	Class 12	None

Learning Objectives
The course aims to give substantive knowledge about:
(i) key features of foreign exchange markets and development over the years
(ii) parity conditions in markets for foreign exchange
(iii) evolution of exchange rate systems from the gold standard to the present
(iv) its operations and hedging of risks in these markets.

Learning outcomes

By studying this course, the students will be able to:

· Gain substantive knowledge of International Financial Management.

· Understand the principles of trading in foreign exchange markets, different instruments traded, risks involved and how to carry out hedging of currency risks.

· Learn how to compute forward rates using cross rates, computation of synthetic quotes and apply rules to determine existence of arbitrage amongst currencies traded.

· Understand how the international markets have evolved and the alternate exchange rate systems world has seen over the years

SYLLABUS OF DSE-6

Unit 1: Introduction To Currency Markets   **(12 hours)**

Spot & Forex market: Introduction and Features, Participants, & their method of communication in forex markets, SWIFT and CHIPS. Currency Quotes and types, Calculation of forward rates using spot rates, Discount/Premium on spot rate, Swap Points and Outright Forward Rates, Forward Rate vs. Expected Future spot rates, Spot rate with and without transaction costs, Payoff Profiles on Forward Exchange, Currency futures and Pay of Profiles, Mark to Market, Cross Rates & Synthetic quotes. Arbitrage: one point, two point and three point (triangular) arbitrage.

Unit 2: Parity Conditions in Currency Markets   **(12 hours)**
Purchasing Power Parity (both absolute and relative versions), Interest Rate Parity (explanation of borrowing and lending criteria, diagrammatic presentation) , covered interest rate parity, International Fischer Effect. The linkages between parity conditions.

Unit 3: Alternate Exchange Rate Systems and Payment Terms   **(9 hours)**

Gold Standard and Gold Exchange Standard System with price adjustment mechanism , EMS and its price adjustment, Hybrid systems , Fixed vs Flexible System, Overview on Brettonwoods System,

IMF, SDR, Triffon Paradox & Smithsonian Agreement. Payment Terms and Methods of Financing International Trade (Letter of Credit, Forfaiting, Factoring, Credit Lines)

Unit 4: Exchange Rate Determination and Exposures   **(12 hours)**

Currency Demand and Supply Curves, Stability of exchange rates and 'J' Curve Effect, Factors Affecting Exchange Rate, Foreign Exchange Exposure: Nature, Definition, Exposure Line and Interpretating Exposure, Statistical Measurement of Exposure, Types of Exposure (Meaning): Transaction, Economic and Translation Exposure, Hedging Strategies to Manage Transaction Exposures. Currency Swaps.

Essential/recommended readings

1.   Apte, P G., Multinational Financial Management.Tata-McGraw Hill. New Delhi.

2.   Levi, Maurice. International Finance. McGraw Hill Inc. New York.

3.   Madura, Jeff. International Financial Management.South Western Cengage Learning.

4.   Seth, A.K., International Financial Management. Galgotia Publishing Company. New Delhi.

5.   Shapiro, Allen C., Multinational Financial Management. Prentice Hall India Pvt Ltd. New Delhi.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Behavioural Economics (DSE 8)	4	3	1	0	Class 12	None

Learning Objectives

The course attempts to impart an understanding of:

(i) the evolution and growing importance of behavioural economics

(ii) the question of choices when outcomes are known

(iii) formulation of choice under conditions of uncertainty

(iv) the theory of games and Nash equilibria under select circumstances

Learning outcomes

By studying this course, the students will be able to:

· To understand the departures from traditional theory by first explaining the decision-making process in a theoretical framework and then using empirical and experimental findings.

· To build a better understanding of consumer choices and behaviours to enhance his/her decision-making and he/she will be able to differentiate between economic and psychological approaches to human decisions. Understands how behavioural economies incorporates psychological factors such as altruism, fairness trust into standard theories to analyse human choices and also have the knowledge of predictive power of economic theories.

· To understand the main normative and descriptive approaches to know principles of decision making under risks

· To apply behavioural theory to interpretation of real decisions and public policy.

SYLLABUS OF DSE-8

Unit 1: Introduction   **(9 hours)**

Introduction to behavioural economics: history, evolution, objective, scope, methods and concepts in behavioural economics.

Unit 2: Choice under certainty   **(12 hours)**

Preferences, rationality, utility, menu dependence, decoy effect, endowment effect, heuristics and biases.

Unit 3: Choice under uncertainty   **(12 hours)**

Probability, Bayes' Rule, Expected value, Confirmation Bias, Expected Utility, Bundling, Allais Problem.

Unit 4: Strategic Actions   **(12 hours)**

Game Theory, Nash Equilibrium, Altruism, Fairness, Justice, Trust, Welfare Economics, Nudge Agenda and behavioural finance.

Essential/recommended readings

·1.   Angner, Erik (2016), A course in behavioral economics, (Second edition,), Palgrave, London

2.   Colin F. Camerer, George Lowenstein & Matthew Rabin (Ed.) (2004), Advances in Behavioral Economics, Princeton University Press.

3.   Wilkinson, Nick and Matthias, Klaes (2012), An introduction to Behavioral Economics, 2nd edition, Palgrave Macmillan.

4.   Abdukadirov, Sherzod (ed.). Nudge Theory in Action: Behavioral Design in Policy and Markets

Suggestive readings

1.   Andrikopoulos, Panagiotis. Modern Finance vs. Behavioural Finance: An Overview of Key Concepts and Major Arguments (June 2005). http://dx.doi.org/10.2139/ssrn.746204

2.   Andreoni, James, Justin M. Rao, and Hannah Trachtman. "Avoiding the ask: A field experiment on altruism, empathy, and charitable giving." Journal of political Economy 125, no. 3 (2017): 625-653

3.   Fama, Eugene F. "Market efficiency, long-term returns, and behavioral finance." Journal of financial economics 49, no. 3 (1998): 283-306.

4.   Falk, Armin, and Christian Zehnder. "A city-wide experiment on trust discrimination." Journal of Public Economics 100 (2013): 15-27.

5.   Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. "Experimental tests of the endowment effect and the Coase theorem." Journal of political Economy 98, no. 6 (1990): 1325-1348.

6.   Samson, Alain. "An introduction to behavioral economics." The behavioral economics guide (2014): 1-12.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Indian Economy (DSE 10)	4	3	1	0	Class 12	None

Learning Objectives

The course is aimed at developing an understanding of:
(i) the different policy regimes in India since Independence: growth and development
(ii) Demographic trends, human development and state policies
(iii) Fiscal and monetary policies and laws related to labour
(iv) Sectoral growth and changes: agriculture, manufacturing and services

Learning outcomes

By studying this course, the students will be able to:

· Understand major issues and challenges facing the Indian Economy.

· Gain skills to analyze key economic issues and policy documents.

· Relate theoretical frameworks of macroeconomics and microeconomics to the Indian context.

SYLLABUS OF DSE-10

Unit 1: Economic Development since Independence   **(12 hours)**

Major Features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

Unit 2: Demographic Trends and policies   **(12hours)**
Population and Human Development Demographic trends and issues; education; health and malnutrition. Policies in poverty; inequality and unemployment.

Unit 3: Macroeconomic Policies and Their Impact   **(9 hours)**

Fiscal Policy; trade and investment policy; financial and monetary policies; labour laws.

Unit 4: Sectoral Growth & Development   **(12 hours)**

Agriculture Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurements. Industry: Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment. Trends and issues in Service Sector.

Essential/recommended readings

·1.   Drèze, J., &Sen, A. (2013). An Uncertain Glory.Princeton University Press.

2. Balakrishnan, P. (2007). The Recovery of India: Economic Growth in the Nehru Era. Economic and Political Weekly, 42(45/46), 52–66.

3. Mohan, R. (2008). Growth Record of the Indian Economy, 1950-2008: A Story of Sustained Savings and Investment. Economic and Political Weekly, 43(19), 61–71.

4. Vaidyanathan, A., & Krishna, K. L. (2007). Institutions and markets in India's development. Oxford University Press.

5. T. Dyson, 2008, India 's Demographic Transition and its Consequences for Development in Uma Kapila, Indian Economy Since Independence, 19th edition, Academic Foundation.

6. Shankar Acharya, 2010, Macroeconomic Performance and Policies 2000-08, in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.

7. Rakesh Mohan, 2010, India 's Financial Sector and Monetary Policy Reforms, in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.

8. PulapreBalakrishnan, Ramesh Golait and Pankaj Kumar, 2008, Agricultural Growth in India Since 1991, RBI DEAP Study no. 27.

9. B.N. Goldar and S.C. Aggarwal, 2005, Trade Liberalisation and Price-Cost Margin in Indian Industries, The Developing Economics, September.

10. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, Trade Liberalisation and New Imported Inputs, American Economic Review, Papers and Proceedings, May.

11. KunalSen, 2010, Trade, Foreign Direct Investment and Industrial Transformation in India, ïnPremachandraAthukorala, editor, The Rise of Asia, Routledge.

12. A. Ahsan, C. Pages and T. Roy, 2008, —Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, Globalization, Labour Markets and Inequality in India, Routledge.

13. DipakMazumdar and SandeepSarkar, 2009, —The Employment Problem in India and the Phenomenon of the Missing Middle, Indian Journal of Labour Economics.

14. J. Dennis Rajakumar, 2011, Size and Growth of Private Corporate Sector in Indian Manufacturing, Economic and Political Weekly, April.

15. Ramesh Chand, 2010, Understanding the Nature and Causes of Food Inflation.Economic and Political Weekly, February.

16. BishwanathGoldar, 2011, Organised Manufacturing Employment: Continuing the Debate. Economic and Political Weekly, April.

17. Basu, K., &Maertens, A. (2012). The new Oxford companion to economics in India.New Delhi Oxford University Press.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Research Methodology (DSE 12)	4	3	0	1	Class 12	None

Learning Objectives

The course provide an understanding of the methods of conducting research through:
(i) introducing students to basic concepts of quantitative and qualitative research methods.
(ii) scientific methods of collecting reliable data and appreciating primary and secondary data
(iii) parametric and non parametric tests and interpretation of the results
(iv) publishing of research and issues of ethics in data collection and use.

Learning outcomes

By studying this course, the students will be able to:

· Assess the roles of the researcher and the informant in the research process and be in a position to apply qualitative and quantitative research methodology.

· Perform literature reviews using print and online databases

· Learn about the various formats for citations of materials

· Describe sampling methods, measurement scales and instruments, and their appropriate uses

· Learn the rationale for research ethics

· Provide understanding of appropriate statistical techniques for summarizing and displaying business and economic data.

· Perform the basic qualitative and quantitative data analysis in a clear concise and understandable manner with an in-depth, faster and accurate univariate, bivariate and multivariate data analysis.

SYLLABUS OF DSE-12

Unit 1: Elements of Research   (15 hours)

Research- Definition, characteristics, Objectives. Types of Research- Quantitative Vs Qualitative; Descriptive, Exploratory and Causal. Research Methodology- Research Process, Formulating the Research Problem, Research Questions. Hypothesis-Formulation of Hypothesis, Role of Hypothesis, tests of Hypothesis and Errors in hypothesis testing. Research Design - importance and types, features for a good research design. Concept of Population and Sample, Sampling Design- Probability and non-probability Sampling techniques, Sample Size and sampling Error.

Unit 2: Understanding Data and its Collection   (15 hours)

Data types - Nominal, Ordinal, Interval and Scale
Primary and Secondary Data- advantages and disadvantages. Primary Data Collection: Observation method, Interview method, Questionnaires-prerequisites and designing, Case Study method Scales-Understanding, Construction and Application (Graphic Rating, Likert scale, paired comparison, ranking, constant sum, semantic differential scale). Secondary sources of data- previous empirical studies, NSSO, CSO, RBI, World Bank.

Unit 3: Processing and Analysis of Data   (10 hours)

Data recording, conducting univariate and bi-variate analysis-using-descriptives, Cross-tabs-chi-square tests of independence, goodness of fit, One Sample t-test, Independent Sample t-test, Paired Sample t-test, (Assumptions Testing and Inferential Analysis ANOVA, Repeated measure ANOVA, MANOVA.
PCA, Cluster analysis, Factor Analysis, Discriminant analysis.

Unit 4: Additional Topics in Research   (5 hours)

Review of Literature-techniques, do's and don'ts of conducting literature survey, citation, referencing styles, ethics in research.

Practical Component (30 hours) : Practicals to be based on use of a statistical software to enable to student to implement all the concepts and tools taken up in the theory classes in the course.

Essential/recommended readings

·1.   Donald R Cooper & Pamela S Schindler, "Business Research Methods", McGraw Hill

2.   Business Research Methods – Alan Bryman& Emma Bell, Oxford University Press.

3.   Ranjit Kumar, "Research Methodology: A Step-by- Step Guide for Beginners" Sage

4.   Joseph F. Hair, Jr. William C. Black, Barry J. Babin, Rolph E. Anderson," Multivariate Data Analysis, Seventh Edition-Pearson's New International Edition

Suggestive readings
1.   Amir D Aczel, "Complete Business Statistics", McGraw Hill Education.

2.   Naresh K. Malhotra, "Marketing Research: An Applied Orientation" PHI

3.   Field, Andy, "Discovering Statistics using IBM SPSS Statistics", 5th Edition, SAGE.

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COMMON POOL OF GENERIC ELECTIVES (GE) COURSES OFFERED BY THE DEPARTMENTS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Introduction to Digital Marketing (GE 2)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to acquaint the students with:

- Key marketing principles and terminology.
- Evolving digital landscape and the strategic role of digital marketing processes and tools in designing the overall Marketing strategy.
- Methodologies, tools and technologies involved in digital marketing.
- Importance of search engines and their role in digital marketing ecosystem.

Learning outcomes

By studying this course, students will be able to:

· Understand the concept of digital marketing and its integration with traditional marketing.

· Understand customer value journey in digital context and behaviour of online consumers.

· learn email, content and social media marketing and apply the learnings to create digital media campaigns.

· Examine various tactics for enhancing a website's position and ranking with search engines and search advertising.

SYLLABUS OF GE-2

Unit 1: Fundamentals of Marketing (6hours)

Importance of marketing; Core marketing Concepts; Company Orientations; Concept of Segmentation, Targeting-Positioning; 7 P's Framework; Product Life cycle; Pricing strategies, Types of distribution channels; Promotion Mix.

Unit 2: Marketing in the Digital World (9 hours)

Digital marketing: Concept, Features, Difference between traditional and digital marketing, Moving from traditional to digital Marketing; Digital Marketing Channels: Intent Based- SEO, Search

Advertising; Brand Based- Display Advertising; Community Based-SMM; Others- Affiliate, Email, Content, Mobile; Customer Value Journey: 5As Framework; The Ozone O_3 Concept Key; Traits of online consumer.

Unit 3: Content, Email and Social Media Marketing   (15 hours)

Content Marketing: Developing a content marketing strategy; Email Marketing: Types of Emails in email marketing, Email Marketing best practices; Social Media Marketing: Building Successful Social Media strategy; Social Media Marketing Channels; Facebook, LinkedIn, YouTube (Concepts and strategies)

Unit 4: Search Marketing   (15 hours)

Introduction of SEM: Working of Search Engine; SERP Positioning; Search Engine Optimization: Overview of SEO Process; Goal Setting-Types

On-Page Optimization: Keyword Research, SEO Process -Site Structure, Content, Technical Mechanics, Headings, Image & Alt text, Social Sharing, Sitemaps, Technical Aspects-Compatibility, Structured Data Markup.

Off Page Optimization: Link Formats, Link Building, Content Marketing, Social Sharing; Black and White Hat Techniques

Search Advertising: Overview of PPC Process; Benefits of Paid Search; Basis of Ranking; Goal Setting-Objectives; Account Setting-Creation of Google Ads, Campaign architecture, Campaign setup, Targeting, Bid Strategy, Delivery, Ad Scheduling, Ad Rotation, Keyword Selection; Ad Copy composition, Ad Extension

Overview of Display Advertising: Working of Display Advertising; Benefits and challenges.

Essential/recommended readings

1.   Dodson, I. (2016). The art of digital marketing: the definitive guide to creating strategic, targeted, and measurable online campaigns. John Wiley & Sons.

2.   Kartajaya, H., Kotler, P., &Setiawan, I. (2016). Marketing 4.0: moving from traditional to digital. John Wiley & Sons.

3.   Ryan, Damien. Understanding Digital Marketing - Marketing Strategies for Engaging the Digital Generation. Kogan Page Limited.

Additional References:

1.   Kotler, P. (2009). Marketing management: A south asian perspective. Pearson Education, India.

2.   Maity, Moutusy. Internet Marketing: A practical approach in the Indian Context. Oxford Publishing.

3.   Gupta, Seema. Digital Marketing. McGraw Hill

4.   Ultimate guide to digital Marketing. Digital Marketer

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Statistics for Business (GE4)	4	3	0	1	Class 12	Mathematics at Class 12 level

Learning Objectives

The objective of this course is to enable students to:
- Describe data using summary statistics.
- Develop detailed understanding of discrete and continuous distributions.
- Develop skills in statistical computing, statistical reasoning and inferential methods.
- Comprehend and analyse real data like real indices.

Learning outcomes

By studying this course, students will be able to:

· Learn tools and concepts of statistical analysis and interpretation.

· Comprehend fundamentals of probability theory.

· Develop skills in statistical computing, statistical reasoning and inferential methods.

· Comprehend and analyse real data like real indices.

SYLLABUS OF GE-4

Unit 1: Descriptive Statistics and Exploratory Data Analysis (15 hours)

Types of Variables (Quantitative, Qualitative, discrete, continuous), Scales of Data Measurement (nominal, ordinal, Interval & Ratio), Variable-; Primary & secondary Data.

Frequency distributions, Relative Frequency, Cumulative Distributions, Percentiles, Quartiles; Graphical representation of data- bar charts, pie, histograms, box plots.

Measures of central tendency: Mean, median, mode, Geometric Mean, Harmonic Mean, Weighted Mean & their properties. Selection of a measure of central tendency.

Measures of Dispersion: Range, inter-quartile range, quartile deviation, mean deviation, standard deviation, variance, coefficient of variance, properties of standard deviation, merits & demerits.

Skewness and Kurtosis: Meaning, measures- Karl Pearson, Bowley, Kelly's, Kurtosis- meaning, Moments, Kurtosis

Bivariate Analysis: Cross-tabulations and Scatter diagram; Correlation, Association and Simple Regression.

Unit 2: Probability (12 hours)

Axioms of probability; Review of counting rules, experiments, sample space, simple and complex events; Addition and multiplication rules; Concepts of Mutually exclusive events, independent events; Concepts of Joint, marginal and conditional probability; Permutation and Combinations

Concept of Discrete and continuous Random Variables; Expected value and variance; Examples of Theoretical Discrete and Continuous Probability Distributions – Binomial, Poisson and Normal distributions.

Unit 3: Sampling, Estimation and Hypotheses (15 hours)

Population versus Sample; Sample Statistics versus population parameters; Definition and Statistical properties of a Random Sample; Point and Interval Estimation and Small Sample Properties of Estimators (unbiasedness, efficiency); Central Limit Theorem. (Interval estimation for mean for large samples)

Basic concepts of Hypotheses Testing: Formulation of Null and Alternate Hypotheses; One-tailed and two-tailed Tests about population Mean; Concepts of Type I and Type II errors. (Hypothesis testing for mean and difference between mean for large samples only)

Unit 4: Index Numbers (6 hours)

Index Numbers: Use and construction of Laspeyres and Paasche index numbers; Fixed and chain base index numbers; Base shifting, splicing and deflating. Construction of real indexes: Consumer Price Index and BSE index.

Practical Component (30 hours) : Practicals to be based on a spreadsheet package (Microsoft Excel or equivalent) to enable the student to execute all the measures and tests taken up in the theory classes in the course.

Essential/recommended readings

1. Spiegel, M.R.(2003). Theory & Problems of Statistics, Schaum's outline series, McGraw Hill.

2. Levin, Richard I. and Rubin, David (1998). Statistics for Management (7th Edition), Pearson.

3. Gupta, S.C. (2018). Fundamentals of Statistics, Himalaya Publishing House

4. Spiegel, M. and Stephens, Larry (2017). Statistics (Schaum's Outline Series), Tata-Mcgraw-Hill, New Delhi

Suggestive readings

1   Nagar, A. L. and Das. R. K.. Basic Statistics (2nd Edition), Oxford University Press

2. Karmel, P. H. and Polasek, M. (1978). Applied Statistics for Economists (4th edition), Pitman.

3. Larsen, Richard J. and Marx, Morris L. (2011). An Introduction to Mathematical Statistics and its Applications. Prentice Hall.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Introduction to Finance (GE6)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at providing a comprehensive introduction to:
- Financial system and its primary constituents.
- Sources of finance and time value of money.
- Basics of Investment and various asset classes.
- Key concepts of international financial management.

Learning outcomes

By studying this course, students will be able to:

Understand the meaning, scope and sources of Finance

· Estimate the present and future values of assets

· Examine the relationship between risk and return, and the nature and sources of risk in a stock market context

· Analyse the currency exchange market to deal exchange rate risk.

SYLLABUS OF GE-6

UNIT – I: A Primer on Financial Markets & Institutions   (9 hours)
An overview of financial system: characteristics & requirements. Components & functions of financial system. Financial markets: characteristics & types. Types & role of Financial Institutions.An overview of the 2007–2008 Financial Crisis.

Unit 2: Corporate Finance: An Overview   (12 hours)
Nature, scope and objectives of Finance, Emerging role of Finance Managers in India and Agency problem.Concept & Meaning of Financial Management, goals of financial management, the three financial decisions- Investing, Financing & Dividend.
Sources of Finance: Equity & Preference Capital, Retained earnings, Debt, Bonds, Long term loans, Short term advances from banks, public deposits & advances from customers and trade creditors.
Concept of Time Value of Money, Compound Value, Present Value, Annuity and Perpetuity.

Unit 3: Investment Management: Basics & Process   (15 hours)
An overview of investment- Investment process, Types of assets- real & financial.Types of investors, types of financial securities & attributes of a good investment.
Concept of Risk & Return (Single asset), risk-return trade off, types of risk- systematic & unsystematic, types of return-holding period return, expected return, actual return.
Examining four broad asset classes: equity, bonds, mutual funds & derivatives.
Equity- three schools of thought on equity valuation- a brief discussion on fundamental analysis, technical analysis and efficient market hypothesis.

Bonds- types, fundamentals, relationship between interest rates & bond prices& yield curve.
Mutual Funds– meaning, importance, structure, mutual fund schemes, Systematic Investment Plan (SIP), Systematic Withdrawal Plan (SWP), Exchange Traded Fund (ETF), Equity Linked Savings Scheme (ELSS) and NAV of Fund.
Derivatives – Meaning and Types of Derivative Instruments (Forwards, Futures, Options and Swaps).
Concept of diversification & portfolios.Portfolio Risk & Return(two security only).

Unit 4: A Beginners' Guide to International Finance   **(9hours)**
International Monetary System- development of international finance and how the international monetary system evolved. Currency exchange markets and rates- currency exchange markets, exchange rate quotations, currency exchange rate appreciation and, depreciation, factors that affect currency exchange rates and arbitrage. Conducting business internationally. Concept of exchange rate risk.

Essential/recommended readings
1.   Bodie, Zvi., Kane, Alex and Marcus, Alan J.. Investments. McGraw Hill.

2.   Chandra, P.. Security Analysis and Portfolio Management. Tata McGraw Hill.

3.   Pathak, Bharati. Indian Financial System. Pearson.

4.   Ronald, W. Melicher and Norton, Edgar A.. Introduction to Finance: Financial Markets, Investment, and Financial Management. Wiley Publishing House. 2012.

5.   Rustagi, R.P., Fundamentals of Financial Management. Taxmann.

Suggestive readings
1.   Khan, M. Y & Jain P. K., Financial Management: Text and Problems. Tata McGraw Hill. New Delhi.

2.   Kohn, Meir. Financial Institutions and Markets. Oxford University Press.

3.   Kidwell, David S., Backwell, David W., Whidbee, David A. and Sias, Richard W. Financial Institutions, Markets and Money. Wiley Publications.

4.   Madura, Jeff. Financial Markets and Institutions. South Western Cengage Learning.

5.   Reilly, Frank K, and Brown, Keith C. Investment Analysis and Portfolio Management. Cengage Learning.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Environmental Economics and Climate Change (GE8)	4	3	1	0	Class 12	None

Learning Objectives

This course aims at inculcating an understanding of:
- How economic activities are affecting the environment.
- Social value of environmental resources.
- Climate change and its consequences.
- Efficient and effective policy measures for protecting the environment.

Learning outcomes

By studying this course, students will be able to:

∴ Understand the linkage between environment and economics.

· Learn the basic theories of environmental economics.

· Understand the basic terminologies related to environment and Climate change.

· Analyse the effects of climate change on India and its future plan for environmental protection and mitigation.

SYLLABUS OF GE-8

UNIT – I: Introduction   (8 hours)
Introduction to Environmental Economics, Material Balance model- economy environmental interactions, reasons for environmental degradation (population, technology, GDP), balance between environment and growth.

Unit 2: Economic Growth and Environmental Degradation   (12 hours)
Theories of relationship between economic growth and environmental degradation: The environmental Kuznets curve hypothesis, The Brundtland Curve hypothesis, The environment Daly Curve hypothesis.

Unit 3: Climate Change and its Challenges   (12 hours)
Introduction to the Climate Change, Drivers of Climate Change, Global impacts of Climate Change: Anthropogenic, Global warming, ozone hole, biodiversity loss, ecosystem services, natural capital and resources. Effect of Climate Change on India: Agriculture, Biodiversity, vulnerability of Coastal Belt, Rural Livelihoods and Food Security in India.

Unit 4: Actions Taken and Policy Framework   (13 hours)
Global Level: Adaptation and Mitigation, Governmental and Intergovernmental Actions to Combat Climate Change: The Role of the Intergovernmental Panel on Climate Change (IPCC), United Nations Framework Convention on Climate Change, The Kyoto Protocol, Paris Agreement etc. The global

carbon market (CDM, JI, ET).India's Position on International Climate Negotiations, India's National Action Plan on Climate Change.

Essential/recommended readings

1.   Callen,Thomas (2007). Environmental Economics, Thomson Learning Inc. Indian Edition.

2.   Dubash, Navroz (2012). Handbook of Climate Change and India: Development, Politics and Governance, Earthscan

3.   Bhattacharya, R. N. (ed.) (2001). Environmental Economics, An Indian Perspective, Oxford University Press.

Suggestive readings

1.   Romm, J.J. 2018. Climate change: What Everyone Needs to Know. Oxford University Press

2.   Dash. S.K. 2008. Climate Change, Cambridge University Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Indian Financial System (GE10)	4	3	1	0	Class 12	None

Learning Objectives

The course attempts to develop an understanding of:

(i) the history and role of the Indian Financial System in economic development

(ii) the role and importance of financial markets; capital, equity and money markets

(iii) commercial banks, development banks, NBFCs - risk and NPAs; role of ARCs.

(iv) role of financial services in credit market

Learning outcomes

By studying this course, students will be able to:

. Analyse the financial market processes and their factors, and make successful financial decisions at an individual as well as company level.

· Evaluate various ways of raising funds from the financial markets domestically or internationally for the company.

· Study the considerations of banking and other financial institutions in real life.

· Evaluate various financial services offered under financial system of India.

SYLLABUS OF GE-10

UNIT – I: Financial System: An Introduction   (6 hours)

Financial System: meaning, characteristics, significance and components; tracing the history of the Indian financial system and its contribution to Economic Development; markets, regulators and participants in the Indian financial system; financial instruments, direct and indirect finance, scams in Indian Financial System.

Unit 2: Financial Markets   (18 hours)

Financial Markets – meaning, types, role, importance, and securities traded; linkages between financial markets and economy. Capital market – meaning, functions, organisation; Equity market – primary and secondary market, ways of raising funds, private equity, venture capital, introduction to debt market. Money market – meaning, functions, organisation, participants, instruments, trading mechanism, role of central bank.

Unit 3: Financial Institutions   (9 hours)

Commercial Banking, Nationalisation of Commercial Banks, Structure of Commercial Banks in India, Depository and Non-Depository Institutions, Universal Banking, Payments Bank, Development Banks (IFCI, IDBI, NABARD and NHB), NBFCs, Risk Management in Banks, ARCs Problem of NPAs.

Unit 4: Financial Services   (12 hours)

Credit Rating – Meaning, Process, Rating Methodology, Rating Symbols and Rating Agencies.
Insurance – Meaning, Importance, Types, Seven Principles and Regulation.
Leasing – Meaning, Features and Types of Leasing; Concept of Hire Purchase, Difference between Hire Purchase and Leasing; Factoring – Meaning, Functions, Types and Procedure; Forfaiting – Meaning, Process, Characteristics, Types, Advantages, Difference between Forfaiting and Factoring; Investment Banking – Meaning, Importance and Services Offered by Investment Bankers.

Essential/recommended readings

1	Khan, M.Y. Indian Financial System. Tata McGraw Hill.

2.	Bhole, L.M. Financial Institutions and Markets. Tata McGraw Hill.

3.	Varshney, P.N. and Mittal, D.K. Indian Financial System. Sultan Chand & Sons.

4.	Pathak, Bharati. Indian Financial System. Pearson Publications.

5.	Shahani, Rakesh. Financial Markets in India: A Research Initiative. Anamica Publishing Co.

Suggestive readings

1.	Gordon, E. &Natarajan, K. Financial Markets and Services. Himalaya Publishing House.

2.	Gupta, Shashi, Aggarwal, Nisha and Gupta, Neeti. Indian Financial System.Kalyani Publishers.

3.	Kumar, Vinod., Gupta, Atul. andKaur, Manmeet. Financial Markets, Institutions and Services, Taxmann Publications.

4.	Madura, Jeff. Financial Markets and Institutions. South Western Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-12): BASIC ECONOMETRICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Basic Econometrics (GE12)	4	3	0	1	Class 12	Knowledge of Inferential and descriptive Statistics

Learning Objectives

The course intends to explain to the student:
(i) the classical linear regression model, OLS, its assumptions, testing and functional forms
(ii) the k-variable linear regression model, testing coefficients and ANOVA, and Restricted Least Squares
(iii) treatment of regressions involving qualitative regressors
(iv) the implications, detection and remedies in case of violation of classical assumptions

Learning outcomes

By studying this course, students will be able to:

∴ Explain Key econometric concepts.

· Formulate simple econometric models

· Interpret the regression results obtained from software packages.

· Identify the errors in regression models and rectify the same.

· Analyse the suitability of the data for solving the problem at hand

SYLLABUS OF GE-12

UNIT – I: The Classical Linear Regression Model (12 hours)
Types of Data: Time Series, Cross Section and Panel Data. Concept of Population Regression Function and Sample Regression Function, Assumptions of the model, Derivation of Coefficients of Regression in a two-variable model, Estimation of the SRF using OLS, Analysis of variance and R squared.
Expectation and standard errors of the regression coefficients and the error term. Gauss Markov Theorem. Interval estimation and tests on population regression coefficients, variance of population disturbance term and forecasts. Testing the significance of the model as a whole. Testing the normality assumption.
Extensions of the Two Variable Linear Regression Model: Regressions through the origin, Scaling of Variables and Regression on Standardized Variables. Functional forms of Linear Regression Models: The double log, semi-log, reciprocal, log- reciprocal models with applications.

Unit 2: Multiple Regression Model   (15 hours)

Coefficients of regression in a multi variable model and their properties. Interval estimation, tests on population regression coefficients and model significance. Correlations, Goodness of fit and the Adjusted R square. Hypothesis testing for significance of the contribution of a variable, structural stability, restricted least squares.

Unit 3: Dummy Variable Regression Models   (6 hours)

Intercept, Slope Dummy variables. Interaction between qualitative variables.Interaction between quantitative and qualitative variables.Use of dummy variables in testing for structural change and for seasonal indices.

Unit 4: Relaxing the Assumptions (12 hours)
Introduction to multicollinearity, heteroscedasticity, autocorrelation and specification errors.The nature of the problem, its detection and corrective measures.
Practical Component (30 hours) **:** Practicals to be based on an econometric software (e.g. Gretl/SPSS/Stata/Eviews/PSPP). The student is expected to implement using the software all the regressions and tests noted in the syllabus.

Essential/recommended readings

1   Gujarati, D. and Sangeetha, N. (2007) Basic Econometrics. Fourth Edition, Tata McGraw-Hill, New Delhi

2.   Dougherty, Christopher. (2011). "Introduction to Econometrics," Oxford University Press,

3.   Wooldridge, J. M. (2006). Introductory econometrics: A modern approach. Mason, OH: Thomson/South-Western.

4.   Manual of the relevant software

Suggestive readings

1.   Asteriou, D., & Hall, S.G. (2011). Applied econometrics. Palgrave Macmillan.

2.   Brooks, Chris (2008). Introductory Econometrics for Finance (2nd edition). Cambridge University Press

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CNC-II/093/1/EC-1273/25/

Dated: 13.05.2025

NOTIFICATION

Sub: Amendment to Ordinance V

(ECR 38-27 dated 17.01.2025)

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

The following Syllabi under Faculty of Applied Social Science and Humanities based on Undergraduate Curriculum Framework 2022, are notified herewith for the information of all concerned:

(1) B.A.(Hons.) Business Economics - Semester 7 **(Annexure-1)**
(2) BMS - Semesters 7 and 8 **(Annexure-2)**
(3) BBA(FIA) - Semesters 7 and 8 **(Annexure-3)**
(4) BMMMC - Semesters 7 and 8 **(Annexure-4)**
(5) B.Voc Web Designing - Semesters 7 and 8 **(Annexure-5)**

REGISTRAR

Based on Undergraduate Curriculum   Framework 2022

UNIVERSITY OF DELHI

UNDERGRADUATE PROGRAMMESOF STUDY

STRUCTURE, COURSES&SYLLABI OF SEMESTER -VII

B.A. (Hons) BUSINESS ECONOMICS

Courses Offered Bythe Department Of Finance And Business Economics,
Faculty Of Applied Social Sciences And Humanities

Category I

Business Economics Course for Undergraduate Programme of study with Business Economics as a Single Core Discipline
(B.A. Honours in Business Economics)

DISCIPLINE SPECIFIC CORE COURSES

Code	Semester	Course Name	Credits	Instruction	Page
DSC – 19	VII	Data Science	4	2L + 2P	

DISCIPLINE SPECIFIC ELECTIVE COURSES

Code	Semester	Course Name	Credits	Instruction	Page
DSE - 1	Odd	Income Tax Law and Practice (already passed)	4	3L+1T	
DSE - 3	Odd	Entrepreneurship (already passed)	4	3L+1T	
DSE - 5	Odd	Investment and Portfolio Optimization (already passed)	4	3L+1T	
DSE - 7	Odd	Monetary Economics (already passed)	4	3L+1T	
DSE - 9	Odd	International Economics (already passed)	4	3L+1T	
DSE - 11	Odd	Understanding Consumers (already passed)	4	3L+1T	
DSE - 12	Odd	Research Methodology (already passed)	4	3L + 1P	
DSE - 13	Odd	Behavioural Finance	4	3L+1T	
DSE – 15	Odd	Development Economics	4	3L+1T	
DSE – 17	Odd	Brand Management	4	3L+1T	
DSE – 19	Odd	Business Valuation	4	3L+1T	
DSE - 21	Odd	Applied Econometrics	4	3L+1P	

GENERIC ELECTIVE COURSES

Code	Semester	Course Name	Credits	Instruction	Page

GE-1	Odd	Principles of Microeconomics (already passed)	4	3L+1T	
GE-3	Odd	Legal Environment of Business (already passed)	4	3L+1T	
GE-5	Odd	Quantitative Techniques in Management (already passed)	4	3L+1T	
GE-7	Odd	Economics of Startups (already passed)	4	3L+1T	
GE-9	Odd	International Economics (already passed)	4	3L+1T	
GE-11	Odd	Economic Policy Framework (already passed)	4	3L+1T	

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Data Science (DSC 19)	4	2	0	2	Class 12	Maths at Class XII level

Learning Objectives

The course aims to:
- Understand the purpose of Data Science is **to find patterns within data**.

- Use various statistical and mathematical techniques to analyse and draw insights from data.

- Explore Special tools and techniques to analyse the data. Realise that data in real life is usually noisy and messy, therefore special tools and techniques are needed to draw meaningful insights from it.

Learning outcomes

By studying this course, the students will be able to:

- Understand the methods and techniques commonly used in data science.

- Retrieve, organize and explore data

- Demonstrate the ability to clean and prepare data for analysis

- Use the techniques of data analysis, inferential statistics, machine learning, and statistical computing in an integrated capacity.

SYLLABUS OF DSC-19

UNIT–I: Introduction to Data Science   [5hours]

Definition of Data, Big Data and Data Science. The current landscape of perspectives - Skill sets needed, Work profile of Data Scientists, Data ethics, valuing different aspects of privacy (eg.GDPR); Data science process overview (Defining Goals – Data acquisition-retrieval-preparation-exploratory analysis-modelling-visualisation); Big Data – problems in handling large data, distributed data storage and processing, Supervised and Unsupervised learning Models, Supervised Learning Models: Classification and regression, bias – variance trade-off.

Basics of Python for Machine Learning.

Unit 2:Data Processing   [10hours]

Data pre-processing: (Data Wrangling) Data cleaning - data integration - Data Reduction, Data Transformation and Data Discretization. (Univariate analysis, Handling Missing values, and outliers, imputation of missing values, encoding of nominal and ordinal variables, scaling/standardization of variables).

Exploratory Data Analysis - Basic tools (plots, graphs and summary statistics)

Feature Selection methods – Filter methods (correlation, ANOVA, chi-square, variance threshold, Phi-k correlation), Wrapper methods, Decision Trees; Random Forests.

Unit 3:Clustering and introduction to Data Visualisation   [5hours]

Clustering: Choosing distance metrics - Different clustering approaches - hierarchical clustering, K-means, DBSCAN, Relative merits of each method. Data Visualization: Basic principles, ideas and tools for data visualization. (Bars, box plots, heat maps, histograms, normal plots)

Unit 4:Machine Learning   [10hours]

Familiarisation with machine learning process (training-testing-validation), Basic Machine,Data Imbalance, Data diversity, Machine Learning Pipeline
Learning Supervised learning algorithms: Linear Regression- Regression diagnostics, checking assumptions of Linear Regression, root mean square error, R2 and adjusted R2
Logistic Regression – Understanding concept and application, Data Imbalance, Evaluation metrics-Classification matrix, Sensitivity, Specificity, ROC curves. Decision trees.

Practical Component (30 practical sessions; total 60 Hours): Practical to be based on Python Programming Language. The student is expected to conduct an end-to-end modelling journey which has Exploratory Data Analysis (EDA), feature engineering, Model development, turning and interpretation of the results. An econometrics-based project to be taken up to constitute the end-term practical examination.

Essential/recommended readings

1. O'Neil Cathy and Schutt Rachel (2014). Doing Data Science, Straight Talk from The Frontline, O'Reilly.

2. McKinney,Wes. (2012). Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython, O'Reilly Media.

3. Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, Jonathan Taylor (2023). An Introduction to Statistical Learning: With Applications in Python,Springer Cham.

Suggested readings

1. Harrison,Matt, (2016), Learning the Pandas Library: Python Tools for Data Munging, Analysis, and Visualization, O'Reilly.

2. Grus Joel (2015), Data Science from Scratch: First Principles with Python, O'Reilly Media.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Income Tax Law and Practice (DSE1)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at
- Introducing basic definitions in Income Tax Act, 1961.
- Computing taxable income under the heads Salaries and House Property
- Calculate Profits and Gains of Business or Profession, Capital Gains and Income from other sources
- Understand deductions from gross taxable income and filling of returns.

Learning outcomes

By studying this course, the students will be able to:

- Understand the Process of determination of taxable income

- Explore the fire pillars of Income Tax

- Apply the deductions to taxable income as per the latest provisions of Income-tax Act, 1961

- Acquire the skill of Filling Basic Returns of Income Tax

SYLLABUS OF DSE-1

Unit 1: Introductory Concepts   (3 hours)

Permanent Account Number (PAN), Assessment Year, Previous Year, Person, Assessee, Gross Total Income, Total income and its computation, Tax Rates, Residential status; Relationship between Residential Status and Incidence of Tax. Incomes Exempted under section 10.

Unit 2: Computation for "Salaries" and "Income from House Property"   (15 hours)

Income under the head "Salaries": Meaning of Salary, basis of charge, Allowances, Perquisites, permissible deductions from salary income, Deduction under Section 80 C.

Income under the head "Income from House Property": Basis of charge, income from let out house property, income from self-occupied property.

Unit 3: Computation for 'Profits and Gains of Business or Profession', 'Capital Gains' and 'Income from other sources' (15 hours)

Profits and gains of business or profession: Basis of charge, important rules regarding assessment of PGBP, computation of Profits from Business or Profession, deductions expressly allowed, expenses expressly disallowed.

Capital gains: basis of charge, meaning of capital asset, cost of acquisition, improvement and indexation, exemptions for capital gains arising from transfer of Capital Assets, calculation of tax on short-term and long-term capital gains.

Income from other sources: basis of charge, dividend, winnings from lotteries, crossword puzzles, etc., interest on securities, advance money received for transfer of a capital asset, permissible deductions.

Unit 4: Computation of Total Income and Tax Liability (12 hours)

Computation of total income; Deductions from gross total income under section 80 C to 80 U; Rebates and reliefs; Set-off and carry forward of losses (Concept only), Concept of advance payment of Tax and Deduction of Tax at Source. Computation of Taxable Income and liability of Tax. e-Filing of Returns: ITR-1 (SAHAJ) and ITR-2

Essential/recommended readings

1. Ahuja, G. and Gupta, R. Simplified Approach to Income Tax. Flair Publications (P) Ltd.

2. Singhania, V.K. and Singhania, M. Students Guide to Income Tax. Taxmann Publications (P) Ltd.

Software which will be used for teaching are

1. 'Excel Utility' available at incometaxindiaefiling.gov.in

2. Vinod Kumar Singhania, e-filing of Income Tax Returns and Computation of Tax Taxmann Publication (P) Ltd, New Delhi. (Latest version)

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Entrepreneurship (DSE 3)	4	3	1	0	Class 12	None

Learning Objectives

The aims of this course are:
- To introduce the concept of entrepreneurship and its role in the economy
- To launch an Entrepreneurial Venture and writing a business plan
- To identify and explore legal and financial requirements of a business
- To understand the role and creativity in sustainable Business

Learning outcomes

By studying this course, the students will be able to:

· Develop critical thinking, problem solving skills and entrepreneurial mind-set in students.

· Enhance the understanding of the entrepreneurial process from idea generation, to concept development and creation of the venture.

· Enable the understanding of the business models, legal aspects of enterprise and writing a business plan.

· Apprise students with ways to finance and scale up the business.

SYLLABUS OF DSE-3

Unit 1: Introduction to Entrepreneurship   **(9 hours)**

Concept of Entrepreneurship; Attributes of Entrepreneur; Distinction between entrepreneur and manager; Concept of corporate entrepreneurship/ intrapreneurship; Concept of social entrepreneurship; Role of entrepreneurship for an economy; Understanding business model strategy; Legal forms of enterprise; case study discussion on entrepreneurs, intrapreneurs, business models

Unit 2: Launching Entrepreneurial Venture   **(12 hours)**

Identification of opportunities and Idea generation and screening methods- Brainstorming, mind-mapping, story-telling, SCAMPER, attribute listing, focus group interviews, customer

feedback; Feasibility studies- Marketing, Financial, Technical, Socio-economic Feasibility; Writing Business Plan

Unit 3: Legal and Financial Aspects   (12 hours)

Legal requirements of business (Basic concept and relevance of patents, copyrights, and trademark); Financing- Start-up phase financing, growth stage financing, Maturity-phase financing; angel investment and venture capital, other forms of external financing; case study discussion on financing a venture

Unit 4: Sustaining and Scaling Up   (12 hours)

Keeping the entrepreneurial spirit alive- Challenges and remedies, Role of creativity and innovation, Barriers to entrepreneurship, Concept of sustainability, Ethical Perspectives; Introducing Shared Innovation into the Business Model; Evolution of CSR from Compliance to Sustainable Entrepreneurship; How to Design CSR Strategies that Optimize Impact for Business and Society

Essential/recommended readings

·1.   Harvard Business Review Entrepreneur's Handbook: Everything You Need to Launch and Grow Your New Business

2.   Hisrich, R. D. International entrepreneurship: starting, developing, and managing a global venture. Sage Publications.

3.   Sharma, S., Starik, M., &Wuebker, R. Sustainability, innovation and entrepreneurship: introduction to the volume.

Additional References:

1.   Blank, S., Andreessen, M., Hoffman, R., &Sahlman, W. A. (2018). HBR's 10 Must Reads on Entrepreneurship and Startups (featuring Bonus Article "Why the Lean Startup Changes Everything" by Steve Blank). Harvard Business Press.

2.   Drucker, P. (2014). Innovation and entrepreneurship. Routledge.

3.   Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A.: Entrepreneurship, Tata McGraw Hill.

4.   Kuratko, D.F., and Rao, T. V., Entrepreneurship: A South-Asian Perspective, Cengage.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Investment and Portfolio Optimization (DSE 5)	4	3	1	0	Class 12	None

Learning Objectives

This course aims to:

- Provide a broad overview of investment and risk associated with it
- Measurement and analysis of return and risk of an equity on the basis of fundamental and technical analysis
- Understand bond fundamentals and interest rate theories
- Construction, analysis and evaluation of a portfolio of securities.

Learning outcomes

By studying this course, the students will be able to:

·   Understand the theoretical and practical background of investments valuation

·   Compute the value of equity and debt instruments

·   Analyse and manage the bond as well as equity portfolios in the real world.

·   Evaluate the performance of the portfolio the portfolio performances

SYLLABUS OF DSE5

Unit 1: Basics of Investment   **(6 hours)**

Investment alternatives and objectives, investment, gambling, speculation, introduction to risk – return trade off: types of risks, sources of risks, measures, analysis, determinants of required rates of return and relationship between risk and return. Types of returns: Holding Period Return (HPR) & Compound Annual Growth Rate (CAGR). Attributes of a good investment. Types of assets: Real Assets versus Financial Assets. Investment Process.

Unit 2: Analysis of Equity   **(12hours)**

Measurement of return and risk of equity shares. Approaches to equity analysis, Fundamental Analysis- Economy, Industry, Company Analysis (EIC framework); Equity Valuation Models (DDM, P/E Ratio model and Free Cash Flow Valuation approach). Valuation based on other ratios-P/B ratio, Price to Sales ratio and Price to Cash flow ratio. Technical Analysis – Concept, market indicators and specific stock indicators.

Random Walk Theory & Efficient Market Hypothesis (EMH): Forms, empirical evidence and tests.

Unit 3: Analysis of Bonds (12hours)

Bond fundamentals, types of bonds & risks in bonds. Valuation of bonds. Bond yields-current yield and Yield-to-maturity (YTM). Bond price-yield relationship, analysis of risks in bonds-duration and modified duration. Theories of term structure-Expectations theory, Segmented markets theory and Liquidity Preference theory. Yield curve.

Unit 4: Portfolio Construction, Management and Evaluation (15hours)

Modern Portfolio theory: Diversification & portfolio risk, Harry Markowitz model, measurement of portfolio risk and return, measurement of co-movements in security returns, calculation of portfolio risk, efficient frontier and optimal risky portfolio. Riskless lending & borrowing and capital market line.
Capital Asset Pricing Model: Development of the CAPM, assumptions, beta and security market line. Sharpe's Single Index Model. Portfolio performance evaluation- Sharpe's index, Treynor's Index, Jensen's alpha, and Information ratio.
Note: Some case studies related to above topics are required to be discussed.

Essential/recommended readings

1.   Bodie, Zvi., Kane Alex and Alan J. Marcus. Investments. McGraw Hill.

2.   Chandra, P. Security Analysis and Portfolio Management. Tata McGraw Hill.

3.   Francis. J.C. & Taylor, R.W. Theory and Problems of Investments. Schaum's Outline Series. TMH. New Delhi,

4.   Fischer, Donald E. and Ronald J. Jordan. Security Analysis and Portfolio Management. PHI Learning.

5.   Pandian, Punithavathy. Security Analysis and Portfolio Management. 2nd Edition. Vikas Publishing House. New Delhi

6.   Reilly, Frank K, and Brown, Keith C. Investment Analysis and Portfolio Management. Cengage Learning.

7.   Rustagi, R.P. Investment Management. Sultan Chand & Sons.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Monetary Economics (DSE 7)	4	3	1	0	Class 12	None

Learning Objectives

The aim of the Course are:

This course provides the student the knowledge of:
- Understand forms of money and its measures and associated theories
- Explore money and capital markets, Financial products, institutions and crises
- Evaluate Interest rates, their determination and associated theories
- Discuss the Structure and role of the banking system and its reforms
- Describe Monetary theory, monetary policy, its goals and current practice in India

Learning outcomes

By studying this course, the students will be able to:

· Develop a critical understanding of functioning of financial institutions, markets and instruments and how growth of the real economy is interspersed with financial innovation and crisis.

· Understand the role of Banks and Capital markets.

· Develop an understanding of theory of monetary policy and how it is conducted in India by Reserve Bank of India.

· Demonstrate basic understanding of few current issues including demonetization, cryptocurrency and problems faced by the banking sector in their appropriate contexts.

SYLLABUS OF DSE7

Unit 1:   **(8 hours)**

Concept, functions and measurement, and Theories of Money Supply Determination, Demonetization and Cryptocurrency.

Unit 2:   **(15 hours)**
Financial Institutions, Markets. Instruments and Financial innovation.

Role of Financial Markets and Institutions; problems of asymmetric information, adverse selection and moral hazard, financial crisis. Money and Capital Markets, Organization, Structure and Reforms in India: Role of Financial Derivatives and other Innovations.

Unit 3: (8 hours)

Interest rates Determination, Sources of interest rate differentials, Theories of Term Structure of Interest rates, Interest rates in India.

Unit 4: (8 hours)
Banking System, Balance Sheet and Portfolio Management, Indian Banking System, Changing role and Structure, Banking Sector Reforms.

Unit 5: (6 hours)
Central Banking and Monetary Policy, Functions, Balance Sheet, Goals, Targets (operating, intermediate and final), Indicators and instruments of monetary control, Tinbergen's theorem, Inflation targeting, monetary management, current monetary policy in India.

Essential/recommended readings

·1.   Fabozzi F J et al(2009): Foundations of Financial Markets and Institutions, Pearson

2.   MishkinFS , Eakins S G,Jayakumar T , Pattnaik R K (2017): Financial Markets and Institutions, Pearson.

3.   Dua, P(2020), "Monetary Policy Framework in India", Indian Economic Review, Vol. 55, Issue 1, June 2020

4.   Jadhav,Narender: Monetary Policy,Financial stability and Central Banking in India Macmillan,NewDelhi,India

5.   Kaul,Vivek(2020) Bad money: inside the NPA Mess and how does it threaten the Indian Banking System, Harper Collin Publisher India

6.   Ghate, C., &Kletzer, K. M. (Eds.). (2016). Monetary policy in India: A modern macroeconomic perspective. Springer

7.   Chibber, Ajay, Salman, Soz, Anees(2021) India's Financial Sector: A Whodunnit

8.   EDs in Unshackling India. Haper Collins Publishers India.

9.   Report of the Working Group: Money Supply Analytics and Methodology of Compilation, 1998 Annual Report; Master Circular - Prudential Norms on Capital Adequacy - Basel I Framework – 2011; RBI Bulletin; Report of Currency and Finance (latest).

10.   Various publications of RBI and other agencies / institutions

11.   Raghuram_Rajan_Committee_on_Financial_Sector_Reforms

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Economics (DSE 9)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to:
- Explain the historical view of International trade and production and consumption gains from trade
- Analyse the working of H-O theory and new trade theory
- Understand the international trade policies and its impact on trade
- Understand the functioning of WTO and its implications for India.

Learning outcomes

By studying this course, the students will be able to:

- Compare basic theories of International Trade and the terms used therein.

- Analyse trade policies and instruments used to control International Trade.

- Discuss the role of WTO and its impact on international Trade.

- Describe various concepts related to Regionalism and Integration and their importance.

SYLLABUS OF DSE-9

Unit 1: International Trade Theories (12 hours)

International trade as an Engine of Growth, Ancient view of International Trade, Theory of Mercantilism, Absolute Advantage theory, Comparative Advantage Theory, Opportunity cost theory of trade, Autarky Equilibrium, Production and Consumption Gains from Trade.

Unit 2: Modern Theories of Trade (12 hours)

Introduction, H-O theory- Assumptions, General Equilibrium framework, the working of H-O theory, Factor price equilibrium theorem, Income Distribution effects of H-O theory, Empirical implications of H-O theory, Leontief Paradox, Factor Intensity Reversal, New trade theories (Difference in technology, Economies of Scale and Monopolistic Competition and Trade)

Unit 3: International Trade Policies and Practices (12 hours)

Trade Policy Instruments, Tariffs Barriers, Import Tariff- It's effect and measurement, Non-Tariff Barriers- Import Quotas, Voluntary Export Restraints, Anti-Dumping, Economic Integrations, Regional groups – EU, NAFTA and SAARC/ ASEAN, Theory of Customs Union - Impact of customs union on trade- trade creation and diversion. Import Substitution and Export Promotion.

Unit 4: WTO and Trade   **(9 hours)**

What is WTO, Objectives, Principles, Areas of Function of WTO, Role of WTO in trade, Foreign Trade Policy of India, The Sanitary and Phyto SanitaryAgreement (SPS) of WTO and Its Implications for India, India & World Trade Organization (WTO): WTO Agreement on Agriculture.

Essential/recommended readings

1.   Salvatore, D. (Edition 2008) , International Economics, Pearson Education : New Delhi

2.   Krugman Paul R. & Obstfeld M. (2013) : International Economics:- Theory and Policy (IXth Edition), Pearson Education , New Delhi.

3.   Cherunilam Francis :International Economics (Vth Edition), McGraw Hill Education (India) Pvt Ltd.- Latest edition

4.   WTO and its implications on Indian Agriculture, National Institute of Agricultural Extension Management (MANAGE), Hyderabad.

Additional References:

1.   Appleyard   Dennis R.; Cobb Steven; Field Alfred J. (2010). International Economics (Vth Edition), McGraw Hill Education (India) Pvt Ltd.

2.   Thompson, Henry(2010): International Economics – Global markets and competition 2nd Edition Singapore; Hachensack, N.J: World Scientific.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Understanding Consumers (DSE 11)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to:
- Understand psyche of a consumer and his personality traits
- Apply theories to learn and predict consumer behaviour
- Learn culture role and dynamics of Family and Consumer socialization
- Analyse consumer decision making process and diffusion of innovation

Learning outcomes

By studying this course, the students will be able to:

· Understand personality theories and their applications to consumer psychology.

· Analyse consumer perception in advertising through psychology based theories of perception.

· Examine behavioural learning theories and consumer attitude formation in the context of advertisements.

· Inpect the role of opinion leaders, family and culture in consumer decisions.

· Identify the use of consumer behaviour concepts in prevalent advertisements.

SYLLABUS OF DSE-11

Unit 1: Personality, Perception and Positioning   (12 hours)

Freudian Theory, Neo-Freudian theory of personality; Personality traits; Anthropomorphism; Self-Perception; Sensory information, Absolute and differential thresholds; Perceptual Selection, Perceptual Organisation, Interpretation of cues and imagery, Risk perception; Positioning and Repositioning (including use of perceptual mapping).

Unit 2. Consumer Learning and Attitude   (12hours)

Elements, Behavioural learning theories (Classical, Instrumental, Observational); Information processing; Cognitive learning theory, Consumer involvement and hemispheric lateralisation; Recognition and recall measures. Consumer attitude formation; Tri-

component attitude model; Attitudes motivational functions; Elaboration Likelihood Model; Cognitive dissonance and conflict resolution; Causality and attribution theory.

Unit 3. Persuasion, Social Setting and Culture   (9hours)

Broadcasted versus Addressable messages, message structure, persuasive appeals; Credibility and persuasive power of reference groups, Opinion leaders (influencers), Word-of-mouth strategic applications
Family and consumer Socialization; family decision making and members' roles; Culture's role and dynamics; Learning Cultural Values; Measuring values; Core values.

Unit 4. Consumer Decision-Making and Diffusion of Innovations   (12 hours)

Consumer decision making: need recognition, decision spectrum, pre-purchase search, evaluation, decision rules, rules and marketing strategy, incomplete information, post-purchase evaluation- brand loyalty, disconfirmation of expectations; Consumer gifting behaviour; Diffusion, Types of innovation, Features affecting adoption, Adoption process.

Essential/recommended readings

·1.   Schiffman, Leon G., Kanuk, Leslie Lazar.,Kumar, S. Ramesh. Consumer Behaviour. 12th ed. Pearson Publications.

Additional References:

1.   Hawkins, Roger J., Best, Kenneth A., Coney. Consumer Behaviour: Building Marketing Startegy. Tata McgrawHill.

2.   Solomon, Michael. Consumer Behaviour: Buying, Having and Being. 12th ed. Pearson Publications.

3.   Nair, Suja. Consumer Behaviour in Indian Perspective. Himalaya Publications.

4.   Kumar, S Ramesh. Conceptual Issues in Consumer Behaviour. Pearson Publication.

5.   Sheth, Jagdish N., Mittal, Banwari. Customer Behaviour: A Managerial Perspective. Thomson Publication.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Research Methodology (DSE 12)	4	3	0	1	Class 12	None

Learning Objectives
The Course aims to:

The course aims to provide an understanding of:
- Discuss concepts of quantitative and qualitative research methods.
- Compare methods of collecting reliable data and appreciating primary and secondary data
- Analyze parametric and non-parametric tests and interpretation of the results
- Understand issues of research ethics in data collection and use

Learning outcomes

By studying this course, the students will be able to:

- Assess the roles of the researcher and the informant in the research process and be in a position to apply qualitative and quantitative research methodology.

- Perform literature reviews using print and online databases

- Explore the various formats for citations of materials

- Describe sampling methods, measurement scales and instruments, and their appropriate uses

- Recognise rationale for research ethics

- Provide understanding of appropriate statistical techniques for summarizing and displaying business and economic data.

- Perform the basic qualitative and quantitative data analysis in a clear concise and understandable manner with an in-depth, faster and accurate univariate, bivariate and multivariate data analysis.

SYLLABUS OF DSE-12

Unit 1: Elements of Research   **(15 hours)**

Research- Definition, characteristics, Objectives. Types of Research- Quantitative Vs Qualitative; Descriptive, Exploratory and Causal. Research Methodology- Research Process, Formulating the

Research Problem, Research Questions. Hypothesis-Formulation of Hypothesis, Role of Hypothesis, tests of Hypothesis and Errors in hypothesis testing. Research Design - importance and types, features for a good research design. Concept of Population and Sample, Sampling Design- Probability and non-probability Sampling techniques, Sample Size and sampling Error.

Unit 2: Understanding Data and its Collection   **(15 hours)**

Data types - Nominal, Ordinal, Interval and Scale
Primary and Secondary Data- advantages and disadvantages. Primary Data Collection: Observation method, Interview method, Questionnaires-prerequisites and designing, Case Study method
Scales-Understanding, Construction and Application (Graphic Rating, Likert scale, paired comparison, ranking, constant sum, semantic differential scale). Secondary sources of data- previous empirical studies, NSSO, CSO, RBI, World Bank.

Unit 3: Processing and Analysis of Data   **(10 hours)**

Data recording, conducting univariate and bi-variate analysis-using-descriptives, Cross-tabs-chi-square tests of independence, goodness of fit, One Sample t-test, Independent Sample t-test, Paired Sample t-test, (Assumptions Testing and Inferential Analysis ANOVA, Repeated measure ANOVA, MANOVA.
PCA, Cluster analysis, Factor Analysis, Discriminant analysis.

Unit 4: Additional Topics in Research   **(5 hours)**

Review of Literature-techniques, do's and don'ts of conducting literature survey, citation, referencing styles, ethics in research.

Practical Component (15 practical sessions; total 30 Hours): Practical to be based on use of a statistical software to enable to student to implement all the concepts and tools taken up in the theory classes in the course.

Essential/recommended readings

·1.   Donald R Cooper & Pamela S Schindler, "Business Research Methods", McGraw Hill

2.   Business Research Methods – Alan Bryman& Emma Bell, Oxford University Press.

3.   Ranjit Kumar, "Research Methodology: A Step-by- Step Guide for Beginners" Sage

4.   Joseph F. Hair, Jr. William C. Black, Barry J. Babin, Rolph E. Anderson," Multivariate Data Analysis, Seventh Edition-Pearson's New International Edition

Suggestive readings
1.   Amir D Aczel, "Complete Business Statistics", McGraw Hill Education.

2.   Naresh K. Malhotra, "Marketing Research: An Applied Orientation" PHI

3.   Field, Andy, "Discovering Statistics using IBM SPSS Statistics", 5th Edition, SAGE.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Behavioural Finance (DSE 13)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:

- Introducing the core principles of behavioural finance, psychological biases and emotions influencing financial decision-making.
- Identifying common biases (e.g., overconfidence, loss aversion) and their impact on investor behaviour and market outcomes.
- Examining how psychological factors contribute to market anomalies and inefficiencies that traditional finance models can't explain.
- Developing skills to apply behavioural finance concepts in real-world scenarios, including portfolio management, financial advising, and investor behaviour analysis.

Learning outcomes

By studying this course, the students will be able to:

- Recognize and explain key psychological biases and how they influence financial decision-making.
- Develop the ability to analyze and interpret market inefficiencies and anomalies using behavioural finance concepts.
- Apply behavioural finance theories to practical financial decisions, such as investment strategies, portfolio management, and retirement planning.
- Assess how emotions and psychological factors impact individual and institutional investor behaviour, and the broader implications for market dynamics.

SYLLABUS OF DSE-13

Unit 1: Introduction to the Practical Applications of Behavioural Finance   **(9 hours)**

Meaning of behavioural finance, traditional finance vs. Behavioural finance, evolution of behavioural finance, key themes in behavioural finance, a brief history of behavioural finance and behavioural finance micro vs. Behavioural finance macro.

Success & failure in investing and understanding behavioural trends in markets.

Unit 2. Heuristics, Biases and Decision making   (15 hours)

How the human mind works: the two systems, heuristics or rules of thumb, rationale for heuristics, categories of heuristics & their biases, familiarity and related heuristics, representativeness and related heuristics, anchoring and irrationality and adaptation.

Behavioural obstacles to investing.

Self-deception: Forms of overconfidence, causes of overconfidence, factors impeding overconfidence, other forms of self-deception, how much do the experts know, the success equation: untangling skill and luck in business.

Investor Behaviour: Portrait of an individual investor, What the heuristics and biases mean for financial decision-making, Implications of overconfidence for decision-making, Influence of emotions, Implications of mental accounting, Behavioural portfolio theory, Knowing yourself: Psychographic models, Basic ingredients of a sound investment philosophy, Strategies for overcoming psychological biases. Case studies

Unit 3: Market Anomalies, Puzzles and Value Investing   (12 hours)

Market Outcomes: Size effect and seasonality, Momentum and long-term reversal, post-earnings announcement drift, the value premium, Equity premium puzzle, Excessive volatility, Bubbles and crashes and Behavioural asset pricing model.

Investment styles: Value and Growth investing. Behavioural obstacles to value investing.

Value Central tenets of value investing, Evidence and prospects of value investing, Strategies of some well-known value investors and Academic research on value investing.

Contrarian investing - The psychology of going against the crowd: Meaning, psychological constraints and conventional versus contrarian portfolio

Unit 4: Market Bubbles, Financial Crisis & Lessons   (9 hours)

Growth trap: Introduction, behavioural anomalies behind investors chasing, fads and fancies, starting of the Indian equity cult, long-term stock returns, examples of growth trap, differentiating between good investment and good business, evidence and lessons for investors.

Bubble trap: Anatomy of financial crisis, how is a bubble formed?, human behavioral anomalies, how does one identify a bubble?, lessons for investors, why do past bubbles not guide us and conclusion.An account of the global financial crisis.

References

Essential

1.   Baker, H. K., &Nofsinger, J. R. (2010). Behavioural Finance: Investors, Corporations, and Markets. Hoboken, New Jersey, United States of America: JohnWiley&Sons.(Chapter 1 and 4)

2. Chandra, P. (2016). Behavioural Finance. Delhi, India: McGraw Hill Education (India).(Chapter: 3,4,,9 and Appendix A)

3. Parikh, P. (2009). Value Investing and Behavioural Finance: Insights into Indian Stock Market Realities. Delhi, India: Tata McGraw-Hill.(Chapter 1,2,3,4 and 11)

4. Pompian, M. M. (2006). Behavioural Finance and Wealth Management: How to Build Optimal Portfolios That Account for Investor Biases. Hoboken, New Jersey, United States of America: John Wiley & Sons. (Chapter 1,2 and 24)

Additional

1. Bazerman, M. H., & Moore, D. A. (2002). Judgment in managerial decision making. New Jersey: John Wiley & Sons. (Malkiel, 2003)

2. Malkiel, B. M. (2003). The Efficient Market Hypothesis and Its Critics. Journal of Economic Perspectives , 17 (1), 59-82.

3. Shefrin, H. (2002). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. New York: Oxford University Press.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Development Economics (DSE 15)	4	3	1	0	Class 12	Knowledge of basics of Economics theory

Learning Objectives

The course aims to help understand the economic, social and institutional factors influencing growth and development. In this light it focusses on:

- Evaluation of development theories
- Addressing issues of poverty and inequality
- Exploring the role of institutions of the state and the market

Learning outcomes

By studying this course, the students will be able to:

· Explore different aspects of growth and development

· Predict and Analyse growth models

· Demonstrate the Interrelationship of poverty, inequality and development are related

· Evaluate role of government and market in economic development

SYLLABUS OF DSE-15

Unit 1: Introduction (9 hours)

Meaning of Economic Development, Comparison of Economic Growth and Development, Measurement of Economic Development- Traditional Approach, PCI and Indices based approach, HDI & its components, Core value of development, Sen's Capabilities Approach and Ultimate objective of economic development, quality of life and happiness index

Unit 2:Development Models (12 hours)

Balanced vs. Unbalanced growth approach, Economic Development of Labour Surplus Economy, Rural-Urban migration model, Export led growth & open economy growth model

Unit 3: Inequality andPoverty (12 hours)

The concept of inequality- various measures of inequality, commonly used inequality measures, gender inequality and economic development, poverty, HPI, poverty traps and vicious circle of

poverty, population growth and economic development, demographic transition theory, cost of education, child labour and externalities, low level of equilibrium trap and critical minimum effort theory

Unit 4: State and Markets   **(12 hours)**

The role of state in neo-liberal regime, strategic retreat of state, Structural adjustment Approach of Bretton woods institution, Success and failure of Economic reform and financial crisis in developing countries- experience of 1990s and later financial crisis in Asian and European countries

References:

Essential

1.   Ray Debraj, (Latest Edition) Development Economics, Oxford University Press.

2.   Jones Charles, (2013) Introduction to Economic Growth, W. W. Nortan& Company.

3.   Meier, (2005) Leading Issues in Economic Development, Oxford University Press.

4.   Michael. P. Todaro, (2014) Economic Developments, Pearson.

5.   Hayami F, (2005) Development Economics, Oxford University Press.

6.   Thirwall A.P. (2003) Growth and Development, Palgrave Macmillan.

Additional

1.   Acemoglu Daron(2009) Introduction to Modern Economic Growth, Princeton University Press.

2.   Cypher James, (2014) The Process of Economic Development 4th Edition, Routledge.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Brand Management (DSE 17)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:

- Understanding the strategic importance of brands for businesses and consumers.
- Developing, positioning, and differentiating brands in competitive markets.
- Building strong brand communications, foster brand loyalty, and engage with customers through various channels.
- Learning brand management tools, techniques, and strategies to manage and grow brands in a dynamic market environment.

Learning outcomes

By studying this course, the students will be able to:

· Comprehend the importance of brands in building sustainable competitive advantage amidst global brands.

· Apply branding concepts resulting into major branding decisions.

· Instil the ability to build strong brands in the digital era.

· Manage branding activities in global markets.

SYLLABUS OF DSE-17

Unit 1: Brand Management   **(12 hours)**

Brand: Concept, Importance, History, Brand Creation across different product categories, Challenges and Opportunities. Strategic Brand Management Process, Brand Equity- Concept, Customer Based Brand Equity, Sources of Brand Equity, Measurement (Qualitative & Quantitative research Techniques). Brand Knowledge, Brand Positioning- Concept, frame of reference, Guidelines. Brand Mantra.

Unit 2: Brand Building and Development   **(12 hours)**

Brand Identity- Concept and elements, Criteria for choosing Brand Elements. Brand Makeovers, Aaker Brand Personality Framework, Legal Branding Considerations in India. Brand Building & Development -Brand Resonance Model, Brand Value Chain. Brand Architecture Strategy (Concept), Brand Extensions.

Unit 3: Branding in the Digital Era   **(9 hours)**

Key Issues for Branding in Digital Era, Brand Engagement, Digital Communications, Social Media Channels, Mobile Marketing, Influencer Marketing, Content Marketing. Big Data & Marketing Analytics Dashboards- Concept, Importance for marketers.

Unit 4: Managing Global Brands   **(12 hours)**

Market Performance - Comparative Methods to assess Brand Equity, Holistic Methods for valuing Brand Equity, Brand Valuation.

Managing Global Brands - Global Branding, Strategies for Creating & Managing Global Brands, Marketing Mix for Global Brands, Marketing to Consumers in Developed versus Developing markets.

References:

Essential

1. Keller, K.L., & Swaminathan, V., et al (2020). Strategic Brand Management: Building, Measuring, and Managing Brand Equity (5th Edition). Pearson.

Additional

Latest edition of the readings should be used.

1. Aaker D.A., &Joachimsthaler E. Brand Leadership: The Next Level of the Brand Revolution. The Free Press.

2. Aaker, J. L. Dimensions of brand personality. Journal of marketing research, 34(3), 347-356.

3. Chiaravalle, B., & Schenck, B.F. Branding for Dummies. Wiley India Edition.

4. Kapferer, J.N. The New Strategic Brand Management: Advanced Insights and Strategic Thinking (5th Edition). London: Kogan Page.

5. Keller, K.L. Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. Journal Of Marketing 57, no 1 (1993);1-29.

6. Keller,K.L.; Sternthal,B. and Tybout, A.M. Three Questions You Need to Ask About Your Brand. Harvard Business Review 80, no 9 (2002);80-89.

7. Moorthi, Y. L. Brand Management: The Indian Context. Vikas Publishing House Pvt Limited.

8. Patel, V. N., & Sharma, S. Brand Management & Consumer Marketing. Oxford Book Company.

9. Upshaw, L. B. Building Brand Identity: A Strategy for Success in a Hostile Marketplace. Wiley Publications.

10. Verma H.V. Brand Management : Text and Cases. Excel Books.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Business Valuation (DSE 19)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:
- Providing an understanding of the key methods and frameworks used in business valuation, including both quantitative and qualitative approaches.
- Equippingstudents with the skills to analyze and interpret financial statements, enabling accurate assessment of a business's financial health and value.
- Developing the ability to assess external market conditions, industry trends, and risk factors that affect the value of a business.
- Applying various valuation techniques (such as discounted cash flow, comparable company analysis, and precedent transactions) in different business contexts like mergers, acquisitions, and investments.

Learning outcomes

By studying this course, the students will be able to:

- Apply key business valuation techniques (DCF, market comps, precedent transactions, asset-based methods) to estimate the value of a company in various scenarios.
- Interpret and critically analyze financial statements (income statement, balance sheet, cash flow) to assess the financial health and value drivers of a business.
- Assess and evaluate macroeconomic, industry, and company-specific factors, and incorporate risk elements into the valuation process.
- Make well-reasoned, defensible business valuation decisions based on solid financial data, market research, and strategic considerations.

SYLLABUS OF DSE-19

Unit 1: Introduction to Business Valuation (6 hours)

Genesis of Valuation; Need for valuation; Hindrances/Bottlenecks in valuation; Business Valuation Approaches; Principles of Valuation (Cost, price and Value); Purpose of Valuation: M & A, Sale of Business, Fund Raising, Voluntary Assessment; Taxation; Finance; Accounting; Industry perspective; Statutory Dimension; Society Angle.

Unit 2: Business Valuation Methods (15 hours)

Discounted Cash flow Valuation: Estimating discount rates- the cost of capital, Cash flow and valuation, valuation of companies: forecasting cash flows. Beyond valuation of companies: Growth, future value drivers, optimum capital structure.

Relative Valuation Method: Meaning, Reasons for popularity and potential pitfalls, Values and multiples- Earnings multiples, book value multiples, revenue multiples, and sector-specific multiples. Equity and Value multiples. Basic steps to using multiples. Reconciling relative and discounted cash flow valuation.

Unit 3: Valuations of Tangibles and Intangibles   (12 hours)

Overview of valuation of Immovable Properties; Plant and Machinery; Equipments; vehicles; Capital Work in progress; Industrial Plots; land and Buildings; Vessels, ships, Barges etc. Definition of Intangible Assets; Categorization of Intangibles- Marketing Related (Trademarks, Trade names, Certification marks, internet domains), Customer or Supplier Related (Advertising Agreements, Licensing, Royalty Agreements, Servicing contracts, Franchise agreements), Technology related (Contractual or non-contractual rights to use: Patented or unpatented technologies, Data Bases, Formulae, Designs, Softwares, Process), Artistic Related (Royalties from artistic works: Plays, Books, Films, Music). Valuation of Human Resources.

Unit 4: Valuation in Mergers and Acquisitions   (12 hours)

Meaning of business mergers, types; Sources of Synergy: revenue, operating expense, cost of capital, tax payments; effect of merger on the earnings per share; estimating synergy and its problems.

References:

1. Chandra, Prasanna. Corporate Valuation: A guide for Analysis, Managers and Investors. McGraw Hill Education Private Limited.

2. Damodaran, A. Damodaran on Valuation, Security Analysis for investment and Corporate Finance (2nd ed.). Wiley India Pvt. Ltd.

3. K. G., CA, &Sehrawat, N. K. Handbook on Valuation- Concept & Cases. New Delhi, Bharat Law House Pvt. Ltd.

4. Mohanty. Pitabas. Business Valuation (Text & Cases). Taxmann Publications Pvt Ltd.

Additional References:

1. Damodaran. Investment Valuation: Tools and Techniques for determining the value of any asset. 3rd Edition. Wiley India Pvt. Ltd.

2. Damodaran. Corporate Finance: Theory and Practical. 2nd Edition. Wiley India Pvt. Ltd.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Applied Econometrics (DSE 21)	4	3	0	1	Class 12	Knowledge of Basic Econometrics

Learning Objectives

The course aims at:

- Illustrate key econometric methods (e.g., OLS, IV, GMM) and apply them to real-world data.

- Develop data analysis skills, including data cleaning, model estimation, and diagnostic testing.

- Conduct causal inference and understand the implications of model assumptions and violations.

- Interpret and communicate econometric results effectively for both technical and non-technical audiences.

Learning outcomes

By studying this course, the students will be able to:

- Formulate and interpret regression results obtained from software packages.

- Identify the errors in regression models and rectify the same.

- Analyse the suitability of different models for solving the problem at hand

- Understand the theoretical basis for techniques widely used in empirical research and consider their application in a wide range of problems.

SYLLABUS OF DSE-21

Unit 1: Empirical Model (3 hours)

Stages in empirical econometric research

Unit 2: Linear Regression Model (9 hours)

The linear regression model in matrix form. Estimation, specification and diagnostic testing.

Unit 3: Instrumental Variable Estimation (12 hours)

Omitted variable in a simple regression model. IV estimation and two stage least squares.

Unit 4: Panel Data Regression (12 hours)

Independent pooled cross section regression, fixed and random effects models.

Unit 5: Limited Dependent Model (9 hours)

Logit and Probit models for binary responses.

Practical: (15 practical sessions; total 30 Hours)

To learn the use of an econometric package STATA/Python/R or any other appropriate one.
To extract data from recognized databases and to execute models from each of the units listed in this each course.

References

1. Gujarati, D. (2014). Econometrics by example, 2nded.Palgrave Macmillan.

2. Gujarati, D., Porter, D. (2012). Basic econometrics, 5th ed.McGraw-Hill

3. Wooldridge, J. (2014). Introduction to econometrics: A modern approach, 5th ed.Cengage Learning.

Additional References:

1. Asteriou, D., & Hall, S. G. (2011). Applied econometrics. Palgrave Macmillan.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

GENERIC ELECTIVES (GE-1): PRINCIPLES OF MICROECONOMICS

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Principles of Microeconomics (GE 1)	4	3	1	0	Class 12	None

Learning Objectives

This course aims
- To offer basic understanding of the basic principles of micro economics like problem of scarcity and choice, demand and supply, elasticity.
- To introduce students with basic consumer theory,
- To acquaint students with production and cost concept
- To expose the student to the basic principles and concepts in Macroeconomic variables -- GDP, consumption, savings, investment, money and credit etc.
- To learn measurement of national income and related aggregates; nominal and real income
- To determine actual and potential GDP
- To understand the functioning of money market

Learning outcomes

By studying this course, students will be able to:

· Explain the principles of economics of the modern economy.
· Interpret the consumer theory, production, and costs etc.
· Analyse the basic principles of macroeconomics, national income accounting and determination of GDP.
· Examine the functioning of the money market.

SYLLABUS OF GE-1

Unit 1: Introduction   **(6 hours)**

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.

Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply,

shifts of supply versus movements along a supply curve, market supply, market equilibrium.

Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.

Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

Unit 2: Consumer Theory (9 hours)

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Costs (9 hours)

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.

Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

Unit 4: Introduction to Macroeconomics (6 hours)

What is macroeconomics, Macroeconomic issues in an economy.

Unit 5: National Income Accounting (6 hours)

Concepts of GDP Aggregates and National Income; measurement of national income and related aggregates; nominal and real income; GDP and welfare and the limitations of the GDP concept.

Unit 6: Determination of GDP (6 hours)

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

Unit 7: Money and Credit (3 hours)

Money in a Modern Economy: Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy

Essential/recommended readings

1. Case, K.E., Fair, R. C., and Oster, S. E. (2017). Principles of Economics (12th Ed.). Pearson.

2. Dornbusch, R., Fischer, S. and Startz. R. Macroeconomics (11th Edition). McGraw-Hill.

3. Mankiw, N.G. (2021). Principles of Economics, (9th Edition). Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

GENERIC ELECTIVES (GE-3): LEGAL ENVIRONMENT OF BUSINESS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Legal Environment of Business (GE 3)	4	3	1	0	Class 12	None

Learning Objectives

The course intends:
- To familiarize the student with the concept and essentials of Indian Contract act which govern business for its efficient conduct and to apply them in real life situations.
- To explain the meaning, nature and incorporation of a company.
- To make students understand and apply the provisions of Sale of Goods Act and Consumer Protection Act.
- To recognize and articulate legal principles related to Limited Liability Partnership and Information Technology Act.

Learning outcomes

By studying this course, students will be able to:

- Examine the basic rules and provisions of Contract and Agreements.

- Recognize provisions to formation and functioning of company and LLP.

- Interpret the significance and role of law of sale of goods act

- Apply the law correctly to different facts and in different contexts

SYLLABUS OF GE-3

Unit 1: Indian Contract Act (12 hours)

Meaning and Essentials of a Contract; Valid, Void and Voidable Contract; Offer and Acceptance; Consideration; Capacity of Parties; Free Consent; Discharge of Contract and Remedies for Breach of a Contract.

Unit 2: Companies Act (12 hours)

Meaning and Nature of Company; Promotion and Incorporation of a Company; Memorandum of Association; Articles of Association; Misleading Prospectus and remedies available to the parties; Board of Directors and their qualification, duties, powers. Company Meetings and Resolutions.

Unit 3: Sale of Goods Act and Consumer Protection Act   **(12 hours)**

Essentials of a Contract of Sale; Sale and Agreement to Sell, Conditions and Warranties; Transfer of Title by Non-Owners; Doctrine of Caveat Emptor; Rights of Unpaid Seller.Consumer Protection Act 2009: Scope and Applicability of the Act. Rights of consumer. Procedure for complaints. Duties and power of Central Consumer Protection Authority.

Unit 4: Limited Liability Partnership Act and IT Act   **(9 hours)**

Meaning and nature of LLP; LLP and Company; LLP Agreement, Partners and Designated Partners, Incorporation of LLP; Partners and their Relations, Extent and limitation of liability of LLP.

Information Technology Act 2000:Concept and role; Digital signature, Electronic governance, Attribution, Acknowledgement and dispatch of electronic records, Regulation of certifying authorities, Digital signatures certificates, Duties of subscribers, Penalties and adjudication, Appellate Tribunal, Offences.

Essential/recommended readings

1.   Bansal, V & Arora, A. Corporate Laws. Vikas Publishing, House (P) Ltd. New Delhi.

2. Kuchhal M.C & Vivek K. Business Legislation for Management. VIKAS Publishing House (P) Ltd.

3. Kumar, A. Corporate Laws. International Book House (P) Ltd.

4. Bare Acts relating to the laws.

Suggestive readings

1.   Chadha, R,. Chadha, S. Corporate Laws. Mayur Paperbacks.   New Delhi.

2. Maheshwari & Maheshwari. Business Law. National Publishing House. New Delhi.

3. Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company. Lucknow.

4. Tulsian, P.C. Business Law. Tata McGraw Hill. New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Total Hours of Teaching	Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice			
Quantitative Techniques in Management (GE 5)	4	3	1	0	45	Class 12	None

Learning Objectives

To apprise students:
- To understand the concepts, formulation and interpretation of linear programming methods and its application in diverse problems.
- To formulate and solve Transportation and Assignment problems
- To understand basic concept, construction of the Network diagram and Critical Path Analysis
- To introduce game theory and network analysis forms part of the course.

Learning outcomes

By studying this course, students will be able to:

- Identify and develop operational research models from the verbal description of the real system.
- Explore the mathematical tools that are needed to solve optimization problems.
- Develop critical thinking and use PERT and CPM techniques to improve decision making.

SYLLABUS OF GE-5

UNIT – I: Introduction - Operations Research, Linear Programming **(15 hours)**
(i)   Introduction to Operations Research, characteristics, Phases, Methodology, Applications and scope
(ii)   Formulation of Linear Programming problems, Graphical Solutions (Special cases: Multiple optimal solution, infeasibility, unbounded solution); Simplex Method, Special cases, Big-M method and Two-phase method; Duality (emphasis on formulation & economic interpretation); Sensitivity Analysis. (Excel Solver application)

UNIT – II:Transportation and Assignment Problem **(12 hours)**
(i)   Transportation Problem: Formulation, Solution by N.W. Corner Rule, Least Cost method, Vogel's Approximation Method (VAM), Modified Distribution Method; Special cases: Multiple Solutions, Maximization case, unbalanced case, prohibited routes.
(ii)   Assignment Problem: Hungarian Method, Special cases: Multiple Solutions, Maximization case, Unbalanced case, Restrictions on assignment.

UNIT – III: Network Analysis   **(9 hours)**

Basic Concept, Construction of the Network diagram, Critical Path Analysis, float and slack analysis (Total float, free float, independent float), probability consideration in PERT (Interface with Project Management open-source software)

UNIT – IV: Decision Theory: **(9 hours)**

Decision making environment, Construction of Pay off Table, Opportunity Loss Table, Decision under uncertainty. Decision under Conflict: Game Theory, Two-person Zero-Sum games, Maximin Minimax Principle, Games without Saddle point - Mixed strategy, Dominance Rule.

Essential/recommended readings

1. Vohra, N.D., Quantitative Techniques in Management (5th ed.). Tata McGraw Hill

2. Swarup, K., Gupta, P.K. and Mohan, Man, Introduction to Management Science Operations Research (19th ed.). Sultan Chand & Sons.

3. Sharma, J.K., Operations Research: Theory and Applications (6th ed.). Trinity.

4. Taha, H.A., Operations Research: An Introduction (9th ed.). Pearson.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Economics of Startups (GE 7)	4	3	1	0	Class 12	None

Learning Objectives

To apprise students:
- To give an overview of startups and its types that would help students to understand basics of starting up new ventures.
- To build and create a successful Business Plan
- To understand various Business models and learn startups
- To familiarize with central and state level institutions supporting small business entreprises.

Learning outcomes

By studying this course, students will be able to:

·   Demonstrate the process and working of a startup.

·   Identify the different ways in which entrepreneurs manifest in start-ups.

·   Understand to create one's own business venture and the various factors that influence successful set-up and sustainable operations.

·   Explore the funding and other institutions supporting small business units.

SYLLABUS OF GE-7

UNIT – I: Startup, Generation & Experimentation   **(9 hours)**
Concept of Startup, Role of digital technologies, Startup ecosystems, the startup movement in India; Generating a value proposition, how valuable are new ideas, Design thinking principles; Experimenting with the prototype, Introduction to lean start-ups, Lean startup principles, Learning and failing fast.

UNIT – II: Building the Business Plan   **(15 hours)**
Beginning Considerations: Building a competitive advantage. The strategic management processes. Conducting a feasibility analysis. Forms of Business ownership. Franchising and entrepreneurship. Buying an existing business, marketing and financial considerations: Building a powerful marketing plan. E-commerce and Entrepreneur. Pricing strategies. Creating a successful financial plan. Choosing the right location and layout.

UNIT – III: Crafting business models and Lean Start-ups (12 hours)

Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analysing business models; Business model canvas, Business Pitching.

UNIT – IV:Institutions Supporting Small Business Enterprises and Ethics (9 hours)
Central level institutions. State level institutions. Other agencies. Industry Associations. Class exercise- discussions on current government schemes supporting entrepreneurship and finding out which scheme will most suit the business plan devised by the student. Importance of Ethical Entrepreneurship, value of ethics to an entrepreneur.

Essential/recommended readings

1.   Scarborough, N. M., Cornwall, J. R., &Zimmerer, T. (2016). Essentials of entrepreneurship and small business management. Boston. Pearson Publications.

2.   Hisrich, R.D., Manimala, M.J., Peters, M.P., Shepherd, D.A., Entrepreneurship, Tata McGraw Hill.

3.   Shukla, M.B., Entrepreneurship and Small Business Management. Kitab Mahal Publishers.

Suggestive readings

1.   Hishrich, R.D. and Peters, M. Entrepreneurship. Irwin Publications.

2.   Barringer, B.R. and Ireland, R. Duane. Entrepreneurship: Successfully launching new ventures. (6th Edition) Pearson

3.   Kuratko, D.F., and Rao, T.V., Entrepreneurship: A South-Asian Perspective. Cengage Publications.

4.   Shankar, R., Entrepreneurship: Theory and Practice. Tata McGraw Hill.

5.   Kathleen, R Allen. Launching New Ventures: An Entrepreneurial Approach. Cengage Learning.

6.   Fisher, Steve and Duane, Ja-Nae. The Startup Equation - A Visual Guidebook for Building Your Startup. Mc Graw Hill Education India Pvt. Ltd.

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
International Economics (GE9)	4	3	1	0	Class XII	NA

Learning Objectives

This course aims at inculcating:
- Basic understanding of fundamentals of international Trade
- An overview of theories of international trade
- Understand the meaning of Balance of Payment and explore the reasons of disequilibrium.
- Determine exchange rates and understand global capital market

Learning outcomes

By studying this course, students will be able to:

- To explain basic concept and origin of International economics through the prism of classical and new classical trade theories

- To explore different terms of trade and their applicability

- To differentiate between Modern and Classical Trade theories.

- To describe the foreign exchange markets and its working

- To analyse global capital market

SYLLABUS OF GE-9

UNIT – I: Introduction to International Trade   [12hours]

Globalization and its growing importance in the world economy; Impact of globalization; International business contrasted with domestic businesses; Cost and benefit analysis of tariff, Effective rate of protection and welfare arguments of tariff and developing countries. Foreign direct investment (FDI) in world economy: Trends, Direction, and flow of FDI; Theories of FDI; Political ideology and FDI.

Unit 2: International Trade Theory   [15hours]

World Trade: An overview; Theories of international trade – Mercantilism; Absolute advantage theory, Comparative advantage theory, Factory proportion theory and Leontief paradox, Product life cycle theory, New trade theory, National competitive advantage: Porter's diamond. International Business Environment: Economic, Demographic, Cultural and Political-legal environment.

Unit 3: Balance of Payment (BoP)   **[6hours]**

Balance of Payment: Meaning, Components (Current, Capital and Official reserve), Reasons for disequilibrium in BoP, Measures to correct disequilibrium, Understanding India's BoP and comparing it with markets like USA and China.

Unit 4: Foreign Exchange and Global Capital Market   **[12hours]**

Exchange Rate Determination: Currency Demand and Supply Curves, Factors Affecting Exchange Rate, Global Capital Market: Introduction, Benefits of global capital market, Growth of global capital market, Global capital market risk, Eurocurrency market, Global bond market, Global equity market, Exchange rate risk, Managing exchange rate risk, Methods of Financing International Trade.

Essential/recommended readings

1. Hill, C. (2021). International business: Competing in the global market place (13th Edition). *Strategic Direction*.

2. Krugman, P. R., & Obstfeld, M. (2009). International economics: Theory and policy. Pearson Education.

3. Levi, M.D. (2009). *International Finance* (5th Edition), Taylor and Francis Ltd.

4. Madura, J. (2020). *International financial management*. Cengage Learning.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Economic Policy Framework (GE11)	4	3	1	0	Class 12	None

Learning Objectives

This course will help students
- to understand the importance, meaning and objective of macroeconomic policies
- to explore role and effect of fiscal policy and government expenditure
- to explore role of monetary policy and banking sector in India
- to analyseefficacy of fiscal/monetary policy under fixed and flexible exchange rate

Learning outcomes

By studying this course, students will be able to:

·   Explore the basic concept of macroeconomics

·   Comprehend different parameters of macroeconomics work under Indian economy.

·   Analyse and Compare the monetary and fiscal policy.

·   Compare different exchange rate regimes.

SYLLABUS OF GE-11

UNIT – I: Meaning and objectives of economic policy (8 hours)

Tools and goals (objectives and instruments of policy) Circular flow of income (start with a two sector model and go up to a five sector model); National Income aggregates and the related concepts of national income; input-output table to calculate national income using the income, expenditure and the value added methods.

Unit 2: Fiscal policy (15 hours)

Objectives and meaning; effect of fiscal policy - role of tax policy (T) and government expenditure (G), Aggregate Demand, Meaning of the multiplier. Government expenditure multiplier and balanced budget multiplier Budget –meaning and purpose – example of India's latest Budget (and various heads). Meaning of fiscal, revenue and primary deficits.

Unit 3: Monetary policy (12 hours)

Meaning and objectives; money and credit – credit creation and instruments of credit control; Inflation targeting, Banking in India – structure, recent developments; issues of NPAs and how to resolve it.

Unit 4: Exchange rate policy (10 hours)

Structure of BOP; meaning of current account deficit and trade deficit; exchange rate definition (real and nominal); fixed vs flexible exchange rate, efficacy of fiscal/monetary policy under fixed and flexible exchange rate , effect of a change in exchange rate on the current account (imports and exports); structure of capital account and role of capital outflows and inflows.

Essential/recommended readings

1 Gupta G.S (2016), Macroeconomics - Theory and Applications (4th edition). McGraw Hill,

2. Shapiro, Edward (1982), Macroeconomic Theory, 5th edition

3. Mankiw, Gregory N. (2010), Macroeconomics (7th edition), Worth Publishers.

4. Sikdar, Soumyen (2011), Principles of Macroeconomics, Oxford University Press

5. Krugman, P.R., Obstfeld, M. and Melitz, M. (2015). International Economics: Theory and Policy, Pearson Education Limited.

6. Dua, P. (2020). Monetary Policy Framework in India, Indian Economic Review, 55(1), June 2020, pp. 117-154.

9.   http://www.inclusivejournal.in/about.html.

10.   Sengupta, R. and Vardhan, H., Non-Performing Assets in Indian Banks, Economic and Political Weekly, 52(12) March 25, 2017, Money, Banking and Finance Special.

11.   Economic Survey, India, latest issue

12.   Union Budget Statement, India, Latest issue

Suggestive readings

1   Abel, Andrew, Bernanke, Ben and Croushore, Dean (2011). Macroeconomics (7th edition). Pearson

2. Ghate, C., &Kletzer, K. M. (eds.) (2016). Monetary policy in India: A modern macroeconomic perspective. Springer.

3.   Kaul, Vivek (2020) Bad Money: Inside the NPA Mess and how it threatens the Indian Banking System, Harper Collins Publisher India.

4.   Chhibber, Ajay and Anees, Salman Soz (2021) India's Financial Sector: A Whodunnit. In Unshackling India. Haper Collins Publishers India.

Note: **Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.**

दिल्ली विश्वविद्यालय

University of Delhi

परिषद शाखा - I, कमरा नं: 212, नया प्रशासनिक खंड, दिल्ली विश्वविद्यालय, दिल्ली-110007, दूरभाष: 011-27001156/54
Council Branch - II, Room No. 211, New Administrative Block, University of Delhi, Delhi – 110007, Ph: 27001156/54

CNC-II/093/1/EC-1276/2025/12
Dated: 31.07.2025

NOTIFICATION

Sub: Amendment to Ordinance V

(ECR 24-8 & 24-9 dated 12.07.2025)

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

The following Syllabi under Faculty of Applied Social Science and Humanities based on Undergraduate Curriculum Framework 2022, are notified herewith for the information of all concerned:

1. The DSC and DSE papers for the B.A. (Hons) Business Economics-Semester-VIII based on Undergraduate Curriculum Framework 2022 (ECR 24-8 dated 12.07.2025) - Annexure-1.
2. The syllabus of B.Voc. Software Development - Semester-VII/ VIII based on Undergraduate Curriculum Framework 2022 (UGCF) (ECR 24-9 dated 12.07.2025) - Annexure-2.

REGISTRAR

UNIVERSITY OF DELHI

UNDERGRADUATE PROGRAMMES OF STUDY

STRUCTURE, COURSES & SYLLABI OF SEMESTER VIII

B.A. (HONOURS) BUSINESS ECONOMICS

COURSES OFFERED BY DEPARTMENT OF FINANCE AND BUSINESS ECONOMICS, FACULTY OF APPLIED SOCIAL SCIENCES AND HUMANITIES

Business Economics Course for Undergraduate Programme of study with Business Economics as a Single Core Discipline
(B.A. Honours in Business Economics)

DISCIPLINE SPECIFIC CORE COURSES

Code	Semester	Course Name	Credits	Instruction	Page
DSC - 20	VIII	Time Series Econometrics	4	3L + 1P	

DISCIPLINE SPECIFIC ELECTIVE COURSES

Code	Semester	Course Name	Credits	Instruction	Page
DSE - 2	Even	Public Finance (Already Passed)	4	3L+1T	
DSE - 4	Even	Advertising Management (Already Passed)	4	3L+1T	
DSE - 6	Even	International Financial Management (Already Passed)	4	3L+1T	
DSE - 8	Even	Behavioural Economics (Already Passed)	4	3L+1T	
DSE - 10	Even	Indian Economy (Already Passed)	4	3L+1T	
DSE - 14	Even	Financial Risk Management	4	3L+1T	
DSE - 16	Even	Marketing Analytics	4	3L+1P	
DSE - 18	Even	Business Tax Planning	4	3L+1T	
DSE - 20	Even	Strategic Management	4	3L+1T	

GENERIC ELECTIVE COURSES

Code	Semester	Course Name	Credits	Instruction	Page
GE-2	Even	Introduction to Digital Marketing (Already Passed)	4	3L+1T	

GE-4	Even	Statistics for Business (Already Passed)	4	3L+1P	
GE-6	Even	Introduction to Finance (Already Passed)	4	3L+1T	
GE-8	Even	Environmental Economics and Climate Change (Already Passed)	4	3L+1T	
GE-10	Even	Indian Financial System (Already Passed)	4	3L+1T	
GE-12	Even	Basic Econometrics (Already Passed)	4	3L+1P	
GE-13	Even	Principles of Macroeconomics (Already Passed)	4	3L+1T	

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical		
Time Series Econometrics (DSC 20)	4	3	0	1	Class 12	Prior knowledge of basic econometrics

Learning Objectives

The course aims:

- To develop a comprehensive set of tools and techniques for analyzing various forms of univariate and multivariate time series.

- To learn the skills needed to do empirical research in fields operating with time series data sets.

- To apply key concepts of estimation and forecasting in a time series context.

- To illustrate the theoretical results using software to estimate time series models

Learning Outcomes

By studying this course, the students will be able to:

- To apply ideas to real time series data and interpret outcomes of analyses

- To demonstrate advanced understanding of the concepts of time series and their application to health, climate, finance and other areas.

- To select an appropriate regression model to analyze a given time-series economic data set, and then conduct forecasting and statistical inference and interpret the results.

- To present their understanding of certain economic problems, and use empirical results to justify their explanation.

SYLLABUS OF DSC-20

Unit 1   **(9 hours)**

Introduction to time series: Exploring time series data patterns; Exploring data patterns with autocorrelation analysis; Decomposition of time series; Choosing a forecasting technique; Measuring Forecasting Error.

Unit 2   **(18 hours)**

Moving Averages and Smoothing Methods: Naïve Models: Forecasting based on averages; Exponential Smoothing Methods; Seasonally adjusting data. Properties of Stochastic Time Series:

Autocorrelation function; Stationarity; Random Walk; Testing for stationarity (unit root tests); Co-integrated Time Series.

Unit 3 (9 hours)

Linear Time Series: Moving Average models; Autoregressive Models; Box-Jenkins methodology; Mixed autoregressive and moving average (ARMA) models. Forecasting with ARMA/ARIMA models; properties of ARIMA forecasts.

Unit 4 (9 hours)

Regression with time series data; Conditional and Unconditional forecasting; Testing for causality; Vector Autoregressive (VAR) Models.

Practical Component (15 practical sessions; total 30 Hours): Practical to be based on econometrics packages such as Python/Eviews/R/Stata. The student is expected to conduct an end-to-end modelling journey which involves analyzing time ordered data, test for stationarity, forcasting and residual diagnostics for model validation. An econometrics-based project to be taken up to constitute the end-term practical examination.

References:

Essential

1.   Hanke, John E. and Dean W. Wichern (2005). Business Forecasting. 8th Edn. New Delhi: Pearson-Prentice Hall.

2.   Makridakis, Spyros, Steven C. Wheelwright and Rob J. Hyndman (1998). Forecasting: Methods and Applications. 3rd Edn. USA: John Wiley and Sons.

Additional

1.   Asteriou, D and Hall, S.G. Applied Econometrics, (4th Edition). Red Globe Press

2.   Stock, J. and Watson, M. Introduction to Econometrics (4th edition) Pearson

3.   Tsay, RS and Chen Rong. Nonlinear Time Series Analysis. Wiley Publications.

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Financial Risk Management (DSE 14)	4	3	1	0	Class 12	None

Learning Objectives

The course aims at:

- To understand various types of financial risks (market, credit, liquidity, operational, etc.) faced by business and financial institutions.
- To learn necessary tools to measure, quantify, and assess financial risks using both qualitative and quantitative techniques.
- To develop, design and implement effective risk management strategies, including the use of financial instruments such as derivatives, hedging, and diversification.
- To apply theoretical knowledge to real-world financial risk scenarios, enabling them to make informed decisions in dynamic market environments.

Learning outcomes

By studying this course, the students will be able to:

- Identify different types of financial risks (market, credit, liquidity, operational) and understand their potential impact on businesses and markets.

- Develop proficiency in using various risk measurement tools and models to quantify financial risk exposure.

- Assess and implement strategies for mitigating financial risks, such as diversification, hedging, insurance, and the use of financial derivatives.

- Make informed and well-structured risk management decisions in real-world contexts, applying their knowledge to optimize financial stability and performance.

SYLLABUS OF DSE-14

Unit 1: Risk Incorporation in Projects   **(15 hours)**

Inflation adjustment and Adjusted Cost of Capital. Conventional Risk Handling techniques in Capital Budgeting: Sensitivity Analysis, Risk Adjusted Discount Rate, Certainty Equivalent, Simulation. Statistical Techniques to handle risk in Capital Budgeting: Standard Deviation, Coefficient of Variation, Probability Distribution *(Cash Flows are independent, fully dependent and partially dependent on other cash flows),* Decision Trees.

Unit 2: Risk Management in Derivatives   **(12 hours)**

Meaning and Types, Stock Futures, Forwards & Options, Commodity Futures, Weather Derivatives, Hedging/Risk Management through stock futures and payoffs, Stock Options: In the money, At the Money and Out of Money, Payoffs under Stock Options Margin Adjustment for futures., Intrinsic Value, Simple Stock, Futures and Options Combination Strategies (Neutralizing the risk, Spread, Straddle, Collars, Covered call). Interest Rate Swaps.

Unit 3: Risk Management through Pricing of Derivatives **(9 hours)**

Pricing of Forwards, Option Pricing using Binomial Model and Black Scholes Model, Put Call Parity Equation, Option Greeks: Meaning and Order of Greeks, Delta of European Stock Options, Delta and Black Scholes Model, Delta Hedging. Sensitivity of an Option: Vega, Theta , Rho & Lamda. Hedging through Gamma & Vega, Making a Portfolio Gamma Neutral, Gamma's relation with other Greeks.

Unit 4: Credit Rating and Risk Management in Insurance **(9 hours)**

Credit Rating: Credit rating in the banking sector, questionnaire method, 'Z' Score, Sensitivity and Transition Probability Matrix, CIBIL. Insurance: Premium Determination for Life: Endowment and Term Policies and Non-Life Policies, Use of Mortality Tables.

References

Essential

1.   Hull. J.C & Basu S., Futures Options and Other Derivatives. Pearson Education

2.   Vohra, N.D. & Bagri, B.R., Futures and Options, Tata McGraw-Hill.

3.   Rustagi, R.P., Investment Management. Sultan Chand & Sons.

4.   Financial management, R .P Rustagi, McGraw Hill

Additional

1.   Parameswaran, S., Futures and Options. Tata McGraw Hill.

2.   Bodie, Zvi., Kane, Alex & Marcus, Alan J., Investments, McGraw Hill.

3.   Benninga, Simon, Financial Modelling with Excel, MIT Press

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CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Marketing Analytics (DSE 16)	4	3	0	1	Class 12	None

Learning Objectives

The course aims to provide an understanding to:
- Market data for informed decision-making.
- Analyse to enhance marketing strategies and performance.
- Assess and improve ROI across marketing efforts.
- Gain proficiency in key marketing analytics tools and methods.

Learning outcomes

By studying this course, the students will be able to:

· Understand the meaning of consumer research and marketing analytics.

· Learn demand analysis and allocation through linear programming as well as analyse advertising effectiveness using causal research.

· Analyse consumer perception using cluster and factor analysis.

· Learn a variety of metrics to enhance customer acquisitions online.

· Conduct analysis of big data for digital analytics in customer journey, touch points and social networks.

SYLLABUS OF DSE-12

Unit 1: Introduction   **(12 hours)**

Adoption and application of marketing analytics: AIDA, CRM; Consumer research intelligence: descriptive, exploratory, predictive and prescriptive analytics; Processes followed in typical marketing analytics projects. Advertising Analytics**:** Advertising elasticity of demand, Promotion allocation through linear programming; Advertising effectiveness using causal research, experimental design (Univariate Analysis of Variance) and test markets;

Unit 2: Consumer Perception and Preference   **(12 hours)**

Consumer perception analysis using factor and cluster analysis; multi-dimensional scaling for brand perception; Consumer attribute preference using conjoint analysis;

Unit 3: Customer Acquisition Metrics (12 hours)

Lead generation metrics, Customer activity metrics, Customer survival analysis-Kaplan Meir Curve and Cox proportional hazards regression, Brand Awareness Recall, Test- drive, Churn, Customer Satisfaction (CSAT), Take Rate, Profit, Net Present Value, Internal Rate of Return, Payback, Cost Per Click (CPC), Transaction Conversion Rate (TCR), Return on Ad Money Spent (ROA), Bounce Rate, WOM (social media reach), Customer Lifetime Value (CLTV).

Unit 4: Digital Analytics: Big Data (9 hours)

Web analytics, Customer journey analysis, Customer touchpoint attribution modeling, Dynamic targeting, Integrated big data models, Social listening, Social network analysis.

Practical Component (15 practical sessions; total 30 hours): Practical component of this course equips students with hands-on experience in using data analytics tools to solve real-world marketing problems. Through software-based exercises using SPSS/ Python, students learn to analyze customer data, conduct segmentation, forecast sales, and evaluate campaign effectiveness. Case-based datasets and live dashboards enable learners to apply theoretical concepts in a practical setting. A project on marketing is to be taken up to constitute the end-term practical examination.

References:

Essential

1.   Maity, M., Guruzada, P., Marketing Analytics - For Strategic Decision Making. Oxford University Press.

2.   Jeffery, Mark. Data-Driven Marketing: The 15 Metrics Everyone in Marketing Should Know. John Wiley & Sons Inc. (Chapter- 4, 5, 6, 7, 8, 9)

3.   Verhoef, P., Kooge, E. and Walk, N. (2016). Creating Value with Big Data Analytics- Making Smarter Marketing Decisions. Routledge. New York.

Additional

1.   Hemann, C. and Burbary K., Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World. Pearson Education.

2.   Venkatesan, R., Farris, P. & Wilcox, R.T. (2018), Cutting Edge Marketing Analytics - Real World Cases and Data Sets for Hands On Learning. Pearson Education Inc.

3.   Sorger, Stephan. Marketing Analytics: Strategic Models and Metrics. CreateSpace Independent Publishing Platform.

4.   Kotler, Philip., Kartajaya, Hermawan., Setiawan, Iwan. Marketing 4.0: Moving from Traditional to Digital. John Wiley & Sons Inc.

5.   Nargundkar, Rajendra., Sainy, Romi. Digital Marketing: Cases from India. Notion Press.

6.   Field, Andy. Discovering Statistics using IBM SPSS Statistics. 5th Edition, SAGE Publications.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Business Tax Planning (DSE 18)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to provide an understanding to:

- Grasp key business tax principles and regulations.
- Develop strategies to minimize tax liabilities legally.
- Analyze the tax impact of business decisions.
- Use practical tax planning methods to optimize business tax positions.

Learning outcomes

By studying this course, the students will be able to:

· Identify the difference between Tax Evasion and Tax Planning.

· Describe how the provisions in the corporate tax laws can be used for tax planning.

· Understand the principles underlying the indirect taxation statutes with reference to Goods and Services Act.

· Compute the assessable value of transactions related to goods and services for levy and determination of duty liability.

SYLLABUS OF DSE-12

Unit 1: Tax Planning and Management (9 hours)

Tax Planning – Meaning, Features, Scope, Importance and Objectives; Difference between Tax Planning, Tax Avoidance and Tax Evasion; Tax Management – Meaning, Difference between Tax Planning and Tax Management; Problems of Tax Planning and Tax Management; Tax Planning for Corporate Entities – Tax Incentives, Tax Rebates, Tax Holidays, Concept of Minimum Alternate Tax (MAT), Tax on Distributed Profits of Domestic Companies.

Unit 2: Tax Planning For Financial Management Decisions (12 hours)

Tax Planning for Capital Structure Decision, Dividend Policy and Dividend Distribution Tax, Inter-Corporate Dividends and Bonus Shares, Tax Provisions Relating to Free Trade Zones, Infrastructure Sector and Backward Areas, Tax Deductions and Collection at Source, Advance Payment of Tax.

Unit 3: Introduction of Goods and Services Tax (GST) (15 hours)

Constitutional Framework of Indirect Taxes before GST, Rationale of GST, Dual GST Model, Structure of GST (SGST, CGST, UTGST & IGST), Supply of Goods and Services, Place of Supply – Intra-State,

Inter-State, Import and Export, Time of Supply, Valuation for GST, Exemption from GST – Small Supplies and Composition Scheme.

Unit 4: Input Tax Credit, Procedures and Special Provisions under GST   (9 hours)

Input Tax Credit (ITC) – Meaning, Eligible and Ineligible Input Tax Credit, Blocked Credits, Tax Credit in respect of Capital Goods, Recovery of Excess Tax Credit, Transfer of Input Credit, Payment of Taxes, Doctrine of Unjust Enrichment, Reverse Charge, Illustrations on Calculation of GST and ITC

Procedures and Special Provisions – Registration, Tax Invoice, Credit and Debit Notes, Returns, GST Audit, Self-Assessment, Summary and Scrutiny, Taxability of E-Commerce, Anti-Profiteering, Avoidance of Dual Control, E-Way Bills, Zero Rated Supply, Offenses and Penalties, Appeals.

(Note: In case of any amendment on GST by the Government of India, the syllabus would be updated accordingly.)

References:

1.   Ahuja, Girish & Gupta, Ravi. Simplified Approach to Corporate Tax Planning and Management. Bharat Publications. New Delhi.

2.   Singhania, Vinod K. Direct Tax Planning and Management. Taxmann Publications.

3.   Bansal, K.M., GST and Customs Law. Taxmann Publications.

4.   Singhania, V.K. GST and Customs Law. Taxmann Publications.

5.   Ahuja, G., and Gupta, R. Systematic Approach to Indirect Taxation (Including GST and Customs). Commercial Law Publisher.

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/ Practice		
Strategic Management (DSE 20)	4	3	1	0	Class 12	None

Learning Objectives

The course aims to:

- Understand the key concepts, models, and frameworks used in strategic management.
- Analyze internal and external business environments for effective strategy formulation.
- Evaluate strategic options and decision-making processes at the corporate and business level.
- Develop strategic thinking and planning skills relevant to real-world organizational challenges.

Learning outcomes

By studying this course, the students will be able to:

- Explain core strategic management theories and their practical relevance.
- Demonstrate the ability to conduct SWOT and competitive analyses.
- Critically assess and compare alternative strategic choices for organizations.
- Apply strategic tools to formulate and present viable business strategies.

SYLLABUS OF DSE-20

Unit 1: Introduction to Strategic Management   **(3 hours)**

Concept of Strategy & Strategic Management, Strategic Intent, Vision and Mission Statements, Strategic Management Process, Reasons for Strategy Failure, Value of Strategic management, Types of Strategies, Limitations of Strategic Management.

Unit 2: Environmental Analysis & Diagnosis   **(9 hours)**

Strategy Analysis: Environmental Appraisal and Scanning Techniques, Need and Characteristics of environmental factors. Analysis of specific environment: Michael E. Porter's 5 Forces Model. Organisational Position and Strategic Advantage Profile, Internal Environment: Value of Systematic Internal Assessment, Profile of Company's Strengths and Weaknesses. SWOT, Michael Porter's Value Chain Analysis, Core Competencies, Core Capabilities and Competitive Advantage, 3 C's Model.

Unit 3: Strategy Formulation, Implementation & Control   **(24 hours)**

Strategy formulation: Formulating Long-Term Objectives and Grand Strategies. Types of Strategies – Corporate Strategy, Business Strategy, Functional Strategy. Strategic Analysis and Choice: Strategic

Analysis at the Corporate Level. Grand Strategy Selection Matrix. Contingency Approach to Strategic Choice, Porter's Competitive Strategies, Portfolio Analysis, BCG Growth Share Matrix, GE Matrix.

Strategy implementation and control: Operationalizing the Strategy Annual Objectives. Implementation procedure of Strategy in an organization. Linking structure to strategy. Organizational leadership. Organizational culture. Managing the Strategy-Culture relationship. Strategic Control and Evaluation: Establishing Strategic Controls. Operational control systems, Balanced Scorecard Methodology.

Unit 4: Global Strategic Management   **(9 hours)**

Global Strategic Planning: Competitive strategies for firms in foreign markets, Strategic Choice in a Global Context. Managing Global Sourcing Opportunities. Strategic Alliances, Types of Strategic Alliances and Business Decisions, Problems Involved in Strategic Alliances.

References:

Essential

1.   Thompson Jr., Arthur A. and Strickland, A.J. (2003). Strategic Management –Concepts and Cases. McGraw-Hill College.

2.   Pearce, J.A. , Robinson, R.B. & Mital, Amita (2017) . Strategic Management: Formulation, Implementation and Control. McGraw Hill Education.

Additional:

1.   David, Fred R. & David, Forest R. (2016). Strategic Management: Concepts and Cases—A Competitive Advantage Approach. Pearson Publications.

2.   Hill, Charles, W.L. & Gareth, R. Jones (2012). Strategic Management: An Integrated Approach. Cengage Learning. India.

3.   Kazmi, Azhar (2014). Strategic Management and Business Policy. McGraw Hill Education.

4.   Jauch, Lawrence R. & Glueck, William F. (1988). Business Policy and Strategic Management. McGraw-Hill Inc-US.

5.   Ghosh P. K. (2012). Strategic Planning and Management. Sultan Chand & Sons. New Delhi.

6.   Wheelan, Thomas, L., Hunger, J. David, Hoffman, Alan N. & Charles E. Bamford (2014). Strategic Management and Business Policy: Globalization, Innovation and Sustainability. Prentice Hall, New Jersey.

7.   Thompson Jr., Arthur A. and Strickland A.J. et al. (2020). Crafting and Executing Strategy: Concepts & Cases. Mc Graw Hill Education.

8.   Kim, W. Chan & Maubourgne, Renee (2004). Blue Ocean Strategy. Harvard Business Review.

9.   Rivkin, Jan W. & Ghemawat, Pankaj (2002). Creating Competitive Advantage. Harvard Business Review.

10.   Porter, Michael E (1990). The Competitive Advantage of Nations. Harvard Business Review.

11.   Porter, Michael E. (1985). Competitive Advantage. The Free Press. New York

12.   Levitt, Theodor. (1983). Globalization of Markets. Harvard Business Review.

13.   Porter, Michael E. (1996). What is Strategy?. Harvard Business Review.

14.   Prahalad, C. K., & Hamel, G. (1990). The Core Competence of the Corporation. Harvard Business Review.