SEMESTER VI B.A. (HONOURS) BUSINESS ECONOMICS

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. Tahahamdy A., Operations Research: An Introduction, 9th ed., Pearson.

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.

DISCIPLINE SPECIFIC CORE COURSE - (DSC-18): ENVIRONMENTAL 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
		Lecture	Tutorial	Practical/ Practice		(if any)
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.

DISCIPLINE SPECIFIC ELECTIVE COURSE 4 (DSE-4): ADVERTISING MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of
		Lecture	Tutorial	Practical/ Practice		the course
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.

DISCIPLINE SPECIFIC ELECTIVE COURSE 12 (DSE-12): RESEARCH METHODOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of
		Lecture	Tutorial	Practical/ Practice		the course
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.

GENERIC ELECTIVES (GE-6): INTRODUCTION TO FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre- requisite of
		Lecture	Tutorial	Practical/ Practice		the course (if any)
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.



STATISTICAL SOFTWARE PACKAGE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title	Credits	Credit d	istribution	of the course	Eligibility	Pre-requisite of
& Code		Lecture	Tutorial	Practical/ Practice	criteria	the course (if any)
Statistical	2	0	0	2	Class XII	Basic
Software						course in
Package						Statistics

Learning Objectives

The Learning Objectives of this course are as follows:

- To familiarize students with data analysis using a statistical software package like SPSS or any other equivalent.
- To provide skills for research analysis and increase employability.
- To lay a foundation for advance data analysis work and higher education.

Learning outcomes

The Learning Outcomes of this course are as follows:

- After studying this course, students will be able to understand basic functions of statistical software package for managing variables and generate descriptive statistics to describe the data and analyze data through graphs and charts.
- After studying this course, students will be able to test differences in sample means.
- After studying this course, students will be able to identify relationships between variables and develop models for predicting dependent variables on the basis of independent variables.
- After studying this course, students will be able to understand data structures and identify clusters in data.
- After studying this course, students will be able to identify principal components that are relevant from a host of variables.

SYLLABUS

Unit 1: Getting started with the Software

(16 hours)

Introduction: Data Entry, Storing and Retrieving Files, Generating New Variables; Managing Data – Listing cases, replacing missing values, computing new variables, recoding variables, selecting cases, sorting cases, merging files, Graphs – Creating and editing graphs and charts; Descriptive Statistics Procedures: Frequencies, Descriptive, Explore, Cross Tabulation.

Unit 2: Hypothesis Testing for Means

(12 hours)

T-tests: One sample test, Independent samples and paired samples t-test; ANOVA – Oneway analysis of variance with post hoc analysis, Two-way analysis of variance.

Unit 3: Testing for Association between Variables

(16 hours)

Chi-square Test of Independence; Bivariate Correlation Analysis: Simple Scatter Plot; Correlation Coefficient: Pearson, Spearman Rho and Kendall Tau Coefficient. Factor analysis.

Unit 4: Regression Analysis

(16 hours)

Linear Regression: Simple Linear Regression, Multiple regression analysis with matrix scatterplot. Multiple Regression: Standard (Enter) and Stepwise Method. Binary Logistic Regression.

Essential/recommended readings

- Performing Data Analysis using IBM SPSS, Lawrence S. Meyers, Glenn C. Gamst, A. J. Guarino, Wiley Publication
- SPSS for Windows Step by Step A Simple Guide and Reference, Darren George and Paul Malley
- SPSS in Simple Steps, Kiran Pandya, Smruti Bulsari, Sanjay Sinha, Dreamtech Press

Suggestive Readings

• Using SPSS in Research, Dr. Radha Mohan, Neelkamal.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.