



CHRIST
(DEEMED TO BE UNIVERSITY)
LAVASA, PUNE, INDIA

**Department of
Commerce and Management
Pune Lavasa Campus**

**Syllabus
BBA
(Business Analytics)
2020-21**

PROGRAMME STRUCTURE

SEMESTER I

Course Code	Title	Type*	Hr	Credits
BBA131	Financial Accounting	Core	4	4
BBA132	Principles of Management	Core	4	4
BBA133	Micro Economics	Core	4	4
BBA134	Business Mathematics	Core	4	4
ENG121	English	AECC	3	2
LAN121	Language	AECC	3	2
BBA111	Holistic Education	SEC	1	0
BBA112	Introduction to MS EXCEL	SEC	2	1
Mandatory Course	Capital market & Business Intelligence-Moody's certified	SEC	3	-
BBA161B	Basics of Programming	GE	2	2

SEMESTER II

	TOTAL CREDITS		30	23
Course Code	Title	Type*	Hr	Credits
BBA231	Organization Behaviour	Core	4	4
BBA233	Business Statistics	Core	4	4
BBA234	Macro Economics	Core	4	4
BBA232	Introduction to Business Analytics	Programme Core(PC)	4	4
ENG221	English	AECC	3	2
LAN221	Language	AECC	3	2
BBA221	Environment Studies	AECC	0	2
BBA211	Holistic Education	SEC	1	1
Mandatory Course	Applied Excel for Business Analytics-Moody's certified	SEC	3	-
BBA161D	Environment Social & Governance	GE	2	2
	TOTAL CREDITS		28	25

SEMESTER III

Course Code	Title	Type*	Hr/wk	Credits
BBA331	Financial Management	Core	4	4
BBA335	Human Resource Management	Core	4	4
BBA361	Marketing Management	Core	4	4
BBA332	Introduction to Database Management	PC	4	4
BBA351	Corporate Accounting	Core	4	4
BBA311	Holistic Education	SEC	1	0
BBA312	Service Marketing	SEC	2	2
Mandatory Course	Applied Analytics-SQL	SEC	3	-
BBA261C	Techniques of Digital Design	GE	2	2
	Organization study			1
	TOTAL CREDITS		28	25

SEMESTER IV

Course Code	Title	Type*	Hour	Credits
BBA431	Cost and Management Accounting	Core	4	4
BBA432	Entrepreneurship Development & Project	Core	4	4
BBA461	Research Methodology	Core	4	4
BBA435	International Business	Core	4	4
BBA	Advanced Python	PC	4	4
BBA411	Holistic Education	SEC	1	1
BBA412	Indian Financial System	SEC	2	1
Mandatory Course	APPLIED R & PYTHON FOR BUSINESS ANALYTICS (MOODY'S)	SEC	3	-
BBA261E	Web page Designing & Multimedia	GE	3	3
	Internship- Analytics based	Internship		2
	TOTAL CREDITS		29	27

SEMESTER V

Course Code	Title	Type*	Hour	Credits
BBA532	Taxation	Core	4	4
BBA533	Strategic Management	Core	4	4
BBA 541E	Data Management for Business Analytics	DSE	4	4
BBA 534	Corporate Law	Core	4	4
BBA531	Machine Learning- 1	DSE	4	4
BBA542E	Data Visualisation tools	DSE	4	4
BBA581	Internship Project	SEC		-
Mandatory Course	APPLIED DATA MINING AND MODELING (MOODY'S)	SEC	3	-
	Capstone project-Analytics	Project		
	TOTAL CREDITS		23	24

SEMESTER VI

Course Code	Title	Type*	Hour	Credits
BBA631	Insurance & Risk management	Core	4	4
BBA632	Operations Management	Core	4	4
BBA 633	Business Law	Core	4	4
BBA641E	Machine Learning- 2	DSE	4	4
BBA 642E	Data Warehousing & Data Mining	DSE	4	4
BBA 643E	Artificial intelligence for Business & Society	DSE	4	4
BBA681	Capstone Project	SEC	2	2
	INDIAN CONSTITUTION	SEC		1
Mandatory Course	APPLIED BIG DATA FOR BUSINESS ANALYTICS (MOODY'S)	SEC	3	-
	TOTAL CREDITS			27

FIRST SEMESTER

BBA131 - FINANCIAL ACCOUNTING

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course is intended to provide basic knowledge about the principles and practices of accounting and equip the students to maintain the books of accounts, leading to the preparation of financial statements, for domestic and global business scenarios.

COURSE LEARNING OUTCOMES: On having completed this course student should be able to:

1. Identify the concepts and conventions driving the principles of Accounting
2. Recognize Indian and International Financial reporting standards.
3. Interpret the double entry aspect of accounting equation.
4. Examine the books of account for rectifications and reconciliations
5. Apply the accounting principles in the preparation of Financial Statements.

PEDAGOGY: This course uses multiple pedagogies like interactive lecture, hands on preparation of financial statements, discussions & presentations and experiential learning of cash book preparation for kirana shops of the locality.

UNIT 1: INTRODUCTION TO ACCOUNTING

6 Hrs.

Level of Knowledge: Conceptual

Meaning, need for accounting, Internal and External users of accounting information, limitations of accounting, accounting Concepts and Conventions, Accounting Practices, Generally Accepted Accounting Principles.

UNIT 2: ACCOUNTING SYSTEMS & PROCESS

12 Hrs.

Level of Knowledge: Analytical

Nature of Accounting, Accounting equation - Systems of Accounting, Process of Accounting transactions- types of Accounts, Rules of Accounting. Journal - Meaning, features, simple and compound entries, Including recording of GST transactions, Capital and revenue expenditures, Capital and revenue receipts, Contingent assets and contingent liabilities, Preparation of ledgers and Trial balance.

UNIT 3: SUBSIDIARY BOOKS**10 Hrs.**

Level of Knowledge: Analytical

Conceptual introduction to subsidiary books - Sales book, Sales return book, Purchases book, Purchase returns book, receivable book, payable book. Practical problems in Cash Book- Single column, double column, and three columnar cash book.

UNIT 4: BANK RECONCILIATION STATEMENT**8 Hrs.**

Level of Knowledge: Analytical

Need for reconciliation and preparation of bank reconciliation statement.

UNIT 5: RECTIFICATION OF ERRORS**8 Hrs.**

Level of Knowledge: Analytical

Need for rectification of errors, types of errors, process of rectification and accounting entries of rectification.

UNIT 6: FINAL ACCOUNTS**12 Hrs.**

Level of Knowledge: Analytical

Preparation of Trading and Profit and Loss account and Balance Sheet of sole trading concerns.

UNIT 7: ACCOUNTING STANDARDS AND IFRS**4 Hrs.**

Level of Knowledge: Conceptual

Types of Accounting standards, Need for IFRS, Ind AS and IFRS.

ESSENTIAL READING

1. Jain S.P., & Narang K L. (2020). *Basic Financial Accounting I*, New Dehli, Kalyani publishers.

RECOMMENDED READING

1. Maheshwari, S.N., & Maheshwari, S.K. (2020). *Advanced Accountancy I*, New Delhi: Jain Book Agency.
2. Shukla, M. (2020). *Advanced Accounts*, New Delhi, S Chand Group
3. Radhaswamy, M & Gupta, R.L. (2020). *Advanced Accountancy 2*, New Delhi, Sultan Chand & Sons.
4. Reddy, A. (2020). *Fundamentals of Accounting*, New Delhi, Himalaya Publishing House
5. Gupta, A. (2020). *Financial Accounting for Management: An Analytical Perspective*, Noida, Pearson Education.
6. Raman, B. S. (2014). *Financial Accounting (1st ed.) I & II*, New Dehli: United Publishers.
7. Porter, G.A., & Norton, C.L. (2013). *Financial Accounting (IFRS update) (6th ed.)*, Cengage Learning.
8. Jawahar Lal & Seema Srivastava (2013). *Financial Accounting* New Delhi: Himalaya Publishing House.
9. Arora M. N. (2013). *Accounting For Management*. New Delhi: Himalaya Publishing House.
10. Bhattacharya .(2013). *Essentials of Financial Accounting (Based on IFRS) (2nd ed.)*, Prentice Hall India.

BBA132 - PRINCIPLES OF MANAGEMENT**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: This subject is a comprehensive learning on what management is all about and different schools of thoughts on management. It gives a clear understanding of management practices and the various functions of management and also gives away the principles of management developed by eminent management thinkers. The syllabus is structured to provide basic conceptual knowledge on the principles of planning, organizing, staffing, motivation, leadership, controlling and to offer orientation to the recent dynamics of managerial practice.

COURSE OBJECTIVES: This course attempts to introduce the basic concepts, functions and processes of management and it enables students to develop competencies and knowledge to become an effective manager.

COURSE LEARNING OUTCOMES: On having completed this course student should be able to:

1. Identify the basic activities which any manager will conduct in the organization.
2. Describe the role of general management for the success of an organization.
3. Analyze the managerial issues one has to tackle in the competitive environment.
4. Develop their managerial ability and professional skills.
5. Adapt to the contemporary trends in the field of management.

PEDAGOGY: This course uses multiple pedagogies like interactive lecture, students' discussions and PPTs, case studies, role plays, and form of experiential learning.

UNIT 1: INTRODUCTION TO MANAGEMENT**10 Hrs.**

Definition – nature, process and significance of management – Role of managers – Managerial Skills and Roles - Evolution of Management Thought: Classical Management Approaches, Behavioral Management Approaches, Quantitative Management Approaches, Modern Management Approaches - Management as a Science or Art - Management as a profession- Administration and Management- Functions of Management – Functional Areas of Management.

UNIT 2: PLANNING AND DECISION MAKING**10 Hrs.**

Planning - Nature and Importance of Planning- Types of Plans - Levels of Planning - Steps in planning - Making Effective Plans- Objectives and Management By Objective (MBO) –Management By Exception (MBE) - Policy and Strategy- Forecasting and Decision Making - Nature of decision making - Types of decisions – Decision Making Process – Rational Perspectives and Behavioural Aspects of decision making.

UNIT 3: ORGANIZING**10 Hrs.**

Organizing - Nature and purpose - Principles of Organization - Types of Organization - Organisational Structure and Design – Line, Staff and functional authority – Conflict between Line and Staff – Overcoming the Line-Staff Conflict. Committees, Departmentation - Span of control – Authority, Responsibility and Accountability - Principles of Delegation - Steps - Centralization Vs Decentralization – Factors determining the degree of Decentralization of authority.

UNIT 4: STAFFING**10 Hrs.**

Staffing - Nature and Purpose of staffing – Importance of staffing – Components of Staffing - Manpower planning - Recruitment and Selection - Training and Development - Performance Appraisal.

UNIT 5: DIRECTING**9 Hrs.**

Directing – Nature of Directing function - Principles – Importance of Effective Direction – Motivating people at work – Motivation theories: Early theories, Contemporary theories – Morale Building – Job Satisfaction - Effective Communication skills for directing – Barriers of communication.

UNIT 6: CONTROLLING AND SUPERVISION**7 Hrs.**

Controlling - Concept, Nature and Importance - Essentials of Control - Requirements of an Effective Control System – Behavioural Implications of Control – Techniques of Managerial control - Co-ordination – Need for co-ordination – Types of Co-ordination - Techniques of Coordination - Cooperation. Supervision – Position

of a supervisor – Qualities of a good supervisor – Key Man – Man in the middle – Middle marginal man – Human relations specialist – Essential requirements of effective supervision.

UNIT 7: CONTEMPORARY ISSUES AND CHALLENGES IN MANAGEMENT OF 21ST CENTURY

4 Hrs.

Leadership and change, Total quality management, Work force diversity, Globalization and innovation, Enterprise mobility, how to manage and control virtual teams, creating an ethical workplace.

CORE TEXT

1. *Stoner, Freeman, Gilbert Jr. (2014). Management (6th edition), New Delhi: Prentice Hall India.*

REFERENCE BOOKS

1. *Daft, R. L. (2009). Principles of Management (1st edition), Cengage Learning.*
2. *Gupta, R.S., Sharma, B.D., & Bhalla. N.S. (2011). Principles & Practices of Management (11th edition). New Delhi: Kalyani Publishers.*
3. *Williams. Management, (International edition) South-western Cengage Learning.*
4. *John R. Schermerhorn. Management, Wiley-India*
5. *Koontz, H., & Weihrich, H. Essentials of Management, McGraw Hill Publishers.*
6. *L M Prasad, (2007). Principles and Practices of Management, Himalaya Publishing House*
7. *Rao, P.S. (2009). Principles of Management, Himalaya Publishing House.*
8. *Moshal, B.S. Principles of Management, Ane Books.*

BBA133 - MICRO ECONOMICS

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course intends to provide the basis for understanding microeconomics concepts and theories that influences the decisions of consumers and business firms.

COURSE OBJECTIVES:

1. To provide a strong theoretical base of microeconomics principles and concepts applied in the field of management.
2. To provide a strong understanding of the challenges of modern managers in the decision making process.
3. To enable the students to apply the knowledge in the practical situations.

COURSE LEARNING OUTCOME:

This course intends to provide the students understanding of various microeconomic variables that determine business decisions and consumer's purchase decisions. Specifically, the syllabus aims to develop fundamental economic principles, theories and concepts useful to business managers.

UNIT 1: BASIC CONCEPTS

10 Hrs.

Level of Knowledge: Basic / Conceptual

Ten principles of economics: How people make decisions, how people interact and how the economy as a whole works- Role of observations and theory in economics- Role of assumptions- Role of Economic models- Wants and resources; Problem of choice, Production Possibility Frontier; Opportunity cost; Basic economic problems common to all economies

UNIT 2: DEMAND AND SUPPLY**15 Hrs.**

Level of Knowledge: Basic / Conceptual

Law of demand, Reasons for the downward slope of the demand curve. Exceptions to the law; Changes in demand; Elasticity of Demand- Degrees of price elasticity with diagrams; Factors determining price elasticity, methods of measurement. Income elasticity demand; Cross elasticity demand; Demand forecasting- Methods; Laws of supply, Changes in supply- Consumers, Producers and the Efficiency of the Markets: Consumer's surplus (Marshall), Producer surplus and Market efficiency- Externalities and Market inefficiency- Public goods and common resources.

UNIT 3: THEORY OF CONSUMER CHOICE AND NEW FRONTIERS IN MICROECONOMICS**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Cardinal utility analysis; Law of diminishing marginal utility; Consumer's surplus (Marshall), Ordinal utility analysis. Indifference curves- Properties, consumer's equilibrium, Price effect, Income Effect and substitution

UNIT 4: THEORY OF PRODUCTION AND COST**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Production function; Law of Variable proportions; Laws of returns, Economies of scale; Producer's Equilibrium with the help of iso-quants and iso-cost lines. Cost function - Important cost concepts. Short run and long run cost analysis (traditional theory) Modern theory of cost- Long run and short run. Revenue analysis. AR and MR

UNIT 5: PRODUCT PRICING AND FACTOR PRICING**15 Hrs.**

Level of Knowledge: Basic / Conceptual

Market structure- Perfect competition, Price and output determination- Role of time element in market price determination. Monopoly- Price output determination, Price discrimination Monopolistic Competition. Price

and Output determination. Selling costs. Product differentiation- oligopoly; Price determination (collusive pricing, price leadership)

ESSENTIAL READING

1. *N. Gregory Mankiw (2012), Principles of Microeconomics, 4th Edition, Cengage Learning India.*

RECOMMENDED READING

1. *Lipsey, R.G. and K.A. Chrystal (1999), Principles of Economics (IX Ed.), Oxford University Press, Oxford*
2. *Ramsfield, E. (1997), Micro Economics (IX edition), W.W Norton and company, New York*
3. *Ray, N.C. (1975), An introduction to Microeconomics, Macmillan company of India Ltd. New Delhi*
4. *Samuelson, PA and W.D. Hague (1972), A textbook of Economic Theory, ELBS Longman group, London.*
5. *Pindyek and Rubinfeld- Micro Economics (Pearson Education).*
6. *G. Mankiv, Economics, Pearson Ed.*
7. *H. L Ahuja, Principles of Microeconomics, S Chand, New Delhi.*

BBA134 - BUSINESS MATHEMATICS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: In recent times Mathematics has emerged as the key for major decision-making process. The subject is introduced to provide the basic knowledge giving emphasis on the applications in business. Understanding of mathematical models is essential to project the real-life scenario in simplified form in business. The study of matrices helps to handle mathematical models with many variables. The decision-making environment is so complex that the right and appropriate decision can only be made with good analytical skills.

COURSE OBJECTIVE:

1. To enable students to appreciate and apply mathematical concepts in decision making.
2. To understand Mathematical equations and inequalities and their solutions.
3. To be able to adopt appropriate Mathematical models.
4. To understand commercial arithmetic and calculus.
5. To be able to interpret mathematical analysis.

LEARNING OUTCOME:

1. The student will be able to understand basic concepts in Mathematics.
2. They will be able to appreciate wide applications of mathematical models in business.
3. They will be able to take data driven decisions.

UNIT 1: LINEAR MODELS**10 Hrs.**

Level of Knowledge: Basic

Linear equations and inequalities in one variable, linear functions, slope and equations of a line, linear mathematics models, constructing mathematical models.

UNIT 2: SYSTEM OF LINEAR EQUATIONS AND MATRICES**10 Hrs.**

Level of Knowledge: Conceptual

Addition of matrices – System of linear equations, addition and multiplication of Matrices –Determinants – Inverse of a matrix by Gauss Jordan method. Application of matrices and Determinants – Solution of a system of linear equations- Gauss elimination method.

UNIT 3: LINEAR PROGRAMMING PROBLEMS**10 Hrs.**

Level of Knowledge: Application

Definition – Linear Programming Problem – Formulation – Solution by Graphical method – simplex method – minimization and maximization problems

UNIT 4: PROBABILITY AND PROBABILITY DISTRIBUTIONS**10 Hrs.**

Level of Knowledge: Basic

Introduction to Probability, Basic Concepts of Probability, Conditional Probability, Independent Events, Bayes' Theorem. Probability Distributions – Binomial, Poisson and Normal distributions, Expected Value.

UNIT 5: COMMERCIAL ARITHMETIC**10 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Simple interest – Compound Interest. Equivalent Rate – Depreciation – Present value. Annuity – Sinking Fund

UNIT 6: CALCULUS**10 Hrs.**

Level of Knowledge: Application

Limits – Differentiation - Methods of differentiation – Second order derivative – Maxima and Minima. Application to commerce and Economics. - Revenue Function – Cost function – Profit function – Elasticity of demand – Breakeven point.

ESSENTIAL READING

1. *Sancheti, D. C., & Kapoor, V. K. (2009). Business Mathematics. New Delhi: Sultan Chand and Sons.*

RECOMMENDED READING

1. *Gupta, J. D., P, K., & Man Mohan. Mathematics for Business and Economics. Tata McGrawHill Publishing Company Limited.*
2. *Navaneetham, P. Business Mathematics and Statistics. Anand Publishers.*
3. *Padmalochan, H. (2010). A Text Book of Business Mathematics, New Delhi: Sultan Chand and Sons.*
4. *Singh, J. K. (2013). Business Mathematics, New Delhi: Himalaya Publishing House*
5. *Vohra, N. D. (2009). Quantitative Techniques in Management (4th ed.). New Delhi: TMH Publishers.*

BBA112 - INTRODUCTION TO MICROSOFT EXCEL**Total Teaching Hours for Semester: 30****Max Marks: 50****Credits: 2**

COURSE DESCRIPTION: This course provides the knowledge base for understanding the workings of excel. The primary objective of the course is to familiarize the students with the basics of Microsoft excel. The course introduces the students to financial and statistical analysis, further the course also deals with practical application of Microsoft excel in day to day business activities. As a prerequisite, the students should have basic knowledge about computers and MS Office.

COURSE OBJECTIVES:

1. To provide students with the fundamental knowledge of the use of computers in business.
2. To provide exposure to the students on MS Office Excel.
3. To apply MS excel functions in business.

UNIT 1: INTRODUCTION TO EXCEL**12 Hrs.**

Basic Excel functions: Structure of an excel function, functions such as SUM (), MIN (), MAX (), AVERAGE (), COUNT (), AUTOSUM, AUTOFILL. Working with an Excel List: Understanding Excel List Structure, sorting a List Using Single Level Sort, Sorting a List Using Multi-Level Sorts, Using Custom Sorts in an Excel List, filter an Excel List Using the AutoFilter, Creating Subtotals in a List, Format a List as a Table, Using Conditional Formatting to Find Duplicates, Removing Duplicates. Excel Data Validation: Understanding the Need for Data Validation, creating a Validation List, adding a Custom Validation Error, Dynamic Formulas by Using Validation Techniques

UNIT 2: EXCEL PIVOTTABLES**8 Hrs.**

Understanding Excel PivotTables, creating an Excel PivotTable, Modifying Excel PivotTable Calculations, Grouping PivotTable Data, Formatting PivotTable Data, Drilling Down into PivotTable Data, Creating Pivot Charts, Filtering PivotTable Data, Filtering with the Slicer Tool.

UNIT 3: CONDITIONAL FUNCTIONS AND WORKING WITH LARGE EXCEL DATA SETS**8 Hrs.**

Conditional Functions: Working with Excel Name Ranges, Using Excel IF () Function, Nesting Functions, Using Excel's COUNTIF () Function, Using Excel SUMIF () Function, Using Excel IFERROR () Function. Working with Large Sets of Excel Data: Using the Freeze Panes Tool, Grouping Data (Columns and/or Rows), Consolidating Data from Multiple Worksheets.

UNIT 4: LOOKUP AND TEXT BASED FUNCTION**6 Hrs.**

Excel Lookup Functions: Using Excel VLOOKUP () Function, Using Excel HLOOKUP () Function, Using Excel INDEX () and MATCH () Functions. Excel Text Based Functions: Using Excel functions such as LEFT (), RIGHT () and MID (), LEN (), SEARCH (), CONCATENATE ().

UNIT 5: FINANCE FUNCTIONS**11 Hrs.**

Introduction to Finance: Time value of money - present value of money – concepts (Theory), Long term and short term investment decisions - capital budgeting, Net present value, Internal rate of return (Theory)
Financial Functions: Depreciation (DB, DDB, VDB), Simple Interest (PMT, NPER, INTRATE) - Present Value, Net Present Value, Future Value (PV, NPV, FV), Annuity, Internal Rate of Return (IRR).

SECOND SEMESTER

BBA231 - ORGANISATION BEHAVIOUR

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: The course focuses on the basic elements that determine human behavior in an organization. It provides the fundamentals of organizational behavior at individual, group and organization level. The course develops understanding organizational effectiveness by effectively managing its people's behaviours at the workplace.

COURSE LEARNING OUTCOMES: On having completed this course student should be able to:

1. Demonstrate understanding of the dynamics of individual and group behavior.
2. Analyses the implication of human behavior in organization functioning.
3. Apply concepts from OB in managing human behaviours at workplace.

PEDAGOGY: This course uses multiple pedagogies like interactive lectures, classroom discussions & presentations, HBR case, article analysis, movie review and role plays.

UNIT 1: INTRODUCTION TO ORGANIZATIONAL BEHAVIOUR

8 Hrs.

Meaning, Definition of Organizational Behavior, Contribution from other disciplines, OB Model, Challenges and Opportunities in organizational behavior.

UNIT 2: PERSONALITY, LEARNING & VALUES

10 Hrs.

Definition, The Big Five Model, Myers-Briggs Type Indicator, Other Personality Traits like Authoritarianism, Locus of Control, Machiavellianism, Self Esteem, Risk Taking, Self-Monitoring and Achievement Oriented.

Meaning of learning; Theories of learning- Classical Conditioning, Operant conditioning, Cognitive theory, Social learning theory, Principles of learning, Schedule of Reinforcement; Importance of values- instrumental and terminal values.

UNIT 3: ATTITUDE

8 Hrs.

Meaning, Formation of attitudes, ABC model, Function of Attitude, Cognitive Dissonance, Changing attitudes; Work Attitudes- Job Satisfaction and Organization Commitment.

UNIT 4: PERCEPTION

6 Hrs.

Meaning, Factors influencing perception, Attribution Theory, Common short cuts in judging others.

UNIT 5: GROUP DYNAMICS

8 Hrs.

Meaning and Types of groups, Stages of Group Development, Group Properties- Norms, Roles, Status, Cohesiveness, Diversity, Size; Group Decision making - Groupthink, Group Shift, Techniques.

UNIT 6: LEADERSHIP

10 Hrs.

Concept of Leadership-Trait Theories-Behavioral Theories, Ohio & Michigan Studies - Managerial Grid; - Contingency Theory-Situational Leadership and Path & Goal of leadership, Transformational, Transactional, Charismatic leaders, Ethical Leadership and Servant Leadership.

UNIT 7: ORGANIZATION CULTURE

10 Hrs.

Definition of organizational Culture - Culture as a descriptive term- Strong versus Weak Culture - Culture's Function-Creating and Sustaining Culture - How employee learn culture-creating positive organizational culture.

ESSENTIAL READING

1. *Stephen P. Robbins, Timothy A. Judge and Neharika Vohra (2019), 18th Ed. Organizational Behaviour. Pearson Education Asia.*

RECOMMENDED READING

1. *Aswathappa, K. (2016). Organizational Behaviour(Text, Cases and Games), 12th Ed. Bangalore: Himalaya Publication.*
2. *Fred Luthans (2017). Organizational Behavior: An Evidence - Based Approach, 12th Ed. McGraw Hill Education.*
3. *Gupta, C. B. (2014). A textbook of organisational behaviour: With text and cases. New Delhi: S Chand & Company.*

BBA233 - BUSINESS STATISTICS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: Business Statistics helps us to make business decisions under uncertainties. Such decisions must be objective and unbiased and based on quantitative data. This necessitates an analysis of data as well as understanding of statistical tools and models. With the business entities keen on making data-driven decisions it is essential for individuals working in this environment to possess skills to use appropriate statistical tools and techniques in order to make decisions backed by data.

COURSE LEARNING OUTCOMES: On having completed this course student should be able to:

1. To apply the relevant concepts of Statistics to a given context/business scenario
2. To articulate a vague business problem by analysing data through Statistical techniques
3. To comprehend and interpret the results of statistical tests and make statistically relevant conclusions/decisions.

PEDAGOGY: This course uses multiple pedagogies like interactive lecture, case study discussions & presentations and by conducting a mini research project

UNIT 1: INTRODUCTION TO STATISTICS**6 Hrs.**

Level of Knowledge: Conceptual

Meaning, Definition, Features, Importance and limitations of statistics. Meaning and difference between primary and secondary data, data collection methods. Classification and tabulation of data (problems)

UNIT 2: MEASURES OF CENTRAL TENDENCY**10 Hrs.**

Level of knowledge: Analytical

Meaning, measures of Central Tendency- Arithmetic Mean, median, mode, geometric mean and harmonic mean(only theory) and partition values- quartiles, deciles, percentiles.

UNIT 3: MEASURES OF DISPERSION AND SKEWNESS**10 Hrs.**

Level of Knowledge: Analytical

Meaning, Definitions, Properties of dispersion - Range, Quartile Deviation, Mean Deviation from Mean and Median, Standard Deviation and coefficient of variation. Skewness-meaning, difference between dispersion and skewness, Karl Pearson's and Bowley's measures of skewness.

UNIT 4: CORRELATION AND REGRESSION**8 Hrs.**

Level of Knowledge: Analytical

Meaning, Definition and Use of Correlation, Scatter diagram, Types of correlation \rightarrow Karl Pearson's correlation coefficient, Spearman's Rank correlation, Probable Error. Regression- Meaning and utility of Regression analysis, Comparison between Correlation and Regression, regression lines $-X$ on Y , Y on X , Regression Equations and Regression Co-efficients.

UNIT 5: TIME SERIES**6 Hrs.**

Level of Knowledge: Analytical

Meaning, Components of time series, Calculation of Secular Trend-Moving Average method (2, 3, 4 & 5 years) and method of Least Squares.

UNIT 6: SAMPLING DISTRIBUTION AND ESTIMATION**6 Hrs.**

Level of Knowledge: Analytical

Introduction to Probability, Basic Concepts of Probability, Probability Distributions – Binomial, Poisson and Normal distributions, Expected Value.

UNIT 7: INTRODUCTION TO INFERENTIAL STATISTICS

14 Hrs.

Level of Knowledge: Conceptual

Introduction to testing of Hypothesis: Procedure for testing hypothesis - Setting of Hypothesis -Null and alternative hypotheses, - Computation of Test statistics, - Types of errors in hypothesis testing - Level of significance, - Critical region and value - Decision making. Test of significance for Large and small sample tests, Z and t tests for mean and proportion, one-way ANOVA, (Excel) Chi-square test for goodness of fit and independence of attributes. Simple problems only.

ESSENTIAL READING

1. *Sharma, J.K (2014) Business Statistics 4th edition Delhi: Vikas Publishing House*
2. *Pillai & Bagavathi (2015) Statistics, S Chand*

RECOMMENDED READING

1. *Levin, R. I., & Rubin, D. S. (2014). Statistics for management. Delhi: Pearson.*

BBA234 - MACRO ECONOMICS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: This course intends to provide the essentials of macroeconomic theory and policies that influences the households, business firms. The course is centred on Indian macroeconomic environment. The students are expected to understand the various macroeconomic variables that determine income, output and employment.

COURSE OBJECTIVES:

1. To provide a strong base of macroeconomic principles and concepts relevant in managerial decision making.
2. To enable the students to apply the knowledge in managerial decision making process.
3. To enable the students to prescribe policies in the light of changing macroeconomic scenario.

LEARNING OUTCOME:

This course intends to provide the basics of macroeconomic theory and policies in order to understand the influence of external environment in doing business. The students are expected to understand the various macroeconomic variables that determine income, output and employment.

UNIT 1: MEASURING A NATION'S INCOME AND COST OF LIVING**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Economy's Income and Expenditure, Measurement of GDP, Components of GDP, Real versus Nominal GDP- The GDP Deflator-The Consumer Price Index- Calculation of CPI- GDP deflator versus the CPI- Correcting economic variables for the effects of inflation- Real and Nominal Interest rates; The limitations of using national income statistics

UNIT 2: GOODS AND MONEY MARKET**15 Hrs.**

Level of Knowledge: Basic / Conceptual

Saving and Investment in the National Income Accounts- The Market for Loanable Funds; Policy changes and impact on the market for loanable funds- Meaning and Functions of Money- Banks and Money Supply; Money creation with 100 percent reserve banking and Fractional reserve banking- Central Bank tools of Monetary Control- Classical theory of Inflation- Classical Dichotomy and Monetary Neutrality- Velocity and Quantity equation- Fisher Effect- Costs of Inflation.

UNIT 3: AGGREGATE DEMAND, AGGREGATE SUPPLY & INFLUENCE OF MONETARY AND FISCAL POLICY ON AGGREGATE DEMAND**15 Hrs.**

Level of Knowledge: Basic / Conceptual

Three Key Facts about Economic Fluctuations, Short run Economic Fluctuations, Aggregate Demand Curve, Aggregate Supply Curve, Two Causes of Economic Fluctuations, Monetary Policy influence on Aggregate Demand- The Theory of Liquidity Preference- Fiscal Policy influence on Aggregate Demand- The Multiplier Effect- Crowding out effect- Stabilisation Policy; Active Versus Automatic Stabilizers

UNIT 4: SHORT RUN TRADE-OFF BETWEEN INFLATION AND UNEMPLOYMENT 10 Hrs.

Level of Knowledge: Basic / Conceptual

The Philips Curve, shifts in Philips Curve: The Role of Expectations, Shifts in Philips Curve and The Role of Supply Shocks, The Cost of Reducing Inflation- Rational Expectations and the possibility of costless disinflation

UNIT 5: SIX DEBATES OVER MACROECONOMIC POLICY**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Monetary and Fiscal Policy – Pros and Cons, Handling Recession: higher spending vs. tax cuts, Monetary Policy: rule vs. discretion, Central Bank: zero inflation, Balanced Budget Debate, Tax Law Reformation for Savings: debate.

ESSENTIAL READING

1. *N. Gregory Mankiw (2014). Principles of Macroeconomics, 6th Edition, Cengage Learning India.*

RECOMMENDED READINGS

1. *Ackley, G. (1976) Macroeconomics, Theory and Policy, Macmillan Publishing Company, New York.*
2. *Day. A.C.L. (1960), Outline of Monetary Economics, Oxford University Press, New Delhi.*
3. *Heijdra, B.J. and F.V. Ploeg (2001). Foundations of Modern Macroeconomics, Oxford University Press, Oxford.*
4. *Lewis, M.K. and P.D. Mizan (2000), Monetary Economics, Oxford University Press, New Delhi.*
5. *Shapiro, E. (1996), Macroeconomics Analysis, Galgotia Publications, New Delhi.*
6. *Dillard, D. (1960), The Economics of John Maynard Keynes, Crosby Lockwood and Sons, London.*
7. *Hanson, A.H. (1963), A Guide to Keynes, McGraw Hill, New York.*
8. *Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.*
9. *Farmer, Roger. (2001), Macroeconomics II Edition ISBN.*
10. *Stanley Fischer and Rudiger Dornbusch. Macro Economics London. Mac Graw-Hill.*

BBA232 - INTRODUCTION TO BUSINESS ANALYTICS

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

DESCRIPTION: Information has been the crux for business success. The advancement in computing and information technology has created the opportunity for businesses to store, organize and analyze vast amounts of their customer data for decision making. This course provides an introduction to database analytics concepts, methods and tools with concrete examples from industry applications. Students will learn the fundamentals & advancement of data analytics driven strategies in creating an edge in today's competitive business environment. At the same time the course provides an introduction to the relatively more recent advancements in analytical methods on business data acquired through online channels, the new Practice of Web analytics.

OBJECTIVES: This course is intended to expose students to the latest tools of Business Analytics and applying those tools for effective decision making.

1. Understand and articulate a business problem and convert it into a viable Analytics question
2. Apply Data visualization for exploratory analysis and communicate effectively to diverse audience
3. Evaluate various analytical approaches and select the most appropriate for the given problem
4. Build Analytics solutions and assess their effectiveness;

UNIT 1: INTRODUCTION TO BUSINESS ANALYTICS

4 Hrs.

Concept of analytics, Types of Analytics, Application fields - Marketing Analytics, Finance

Analytics, HR Analytics, Operation Analytics, organization and source of data, importance of data quality, dealing with missing or incomplete data, Role of Data Scientist in Business & Society.

UNIT 2: DATA BASES, DATA WAREHOUSING AND DATA MINING**6 Hrs.**

Types of Data Sources- Structured Vs Semi Structured Vs Unstructured data, Data Warehouse Vs Databases, Relational Database Vs Non-Relational Database, RDBMS Data structures, Columnar Data structures. Data Mining meaning, Association Rules and clustering, Decision trees, Random forests.

UNIT 3: ANALYTICS METHODOLOGY**8 Hrs.**

Introduction to Analytics Methodology, preparing objectives & identifying data requirements, Data Collection, Understanding data, Data preparation – Data Cleansing, Normalisation, Data preparation, Data Blending, Data Modelling, Evaluation & feedback

UNIT 4: VISUALISATION OF DATA**8 Hrs.**

Introduction, Data summarization methods; Tables, Graphs, Charts, Histograms, Frequency distributions, Relative Frequency Measures of Central Tendency and Dispersion; Box Plot; Basic probability concepts, conditional probability, Probability distributions, Continuous and discrete distributions, sequential decision making.

UNIT 5: TIME SERIES**12 Hrs.**

Trend Analysis, Seasonality and cyclical behaviour, Moving Average, Exponential smoothing methods – Single exponential, double exponential, HOLT-WINTERS, ARIMA, Multiple linear regression based forecasting.

UNIT 6: PREDICTIVE ANALYSIS**16 Hrs.**

Simple linear regression: coefficient of determination, significance tests, residual analysis, confidence and prediction intervals. Multiple linear regression: coefficient of multiple coefficient of determination, interpretation of regression coefficients, categorical variables, heteroscedasticity, multicollinearity, outliers, auto regression and transformation of variables.

UNIT 7: BUSINESS ANALYTICS FUTURE TRENDS**6 Hrs.**

Role of Artificial Intelligence in Business, Machine Intelligence, Competitive Intelligence, Text Mining, Web Analytics (Web content mining, Web usage mining, Web structure mining), Role of Intelligent Agents in e-business, e-commerce, m-commerce, Location Analytics, Intelligent Agent in search & retrieval, Personalization and Comparison), Social Networking Analysis, Big Data Tools & Techniques, Content Analytics (Sentimental Analysis & Opinion Analysis). Ethical and Legal considerations in Business Analytics

ESSENTIAL READING

1. *Turban E, Armson, JE, Liang, TP & Sharda, Decision support and Business Intelligence Systems, 8 th Edition, John Wiley & Sons, 2007*
2. *Frank J. Ohlhorst, Big Data Analytics, 1st Edition, Wiley, 2012.*
3. *Efraim Turban, Ramesh Sharda, Jay Aronson, David King, Decision Support and Business Intelligence Systems, 9th Edition, Pearson Education, 2009.*

ADDITIONAL READING

1. *Microsoft Office 2007 Business Intelligence - Reporting, Analysis, and Measurement from the Desktop, Doug Harts, TATA McGraw-Hill Edition, 2008*
2. *Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner, Galit Shmueli, Nitin R. Patel, Peter C. Bruce, Wiley Publication, 2010*
3. *The New Science of Retailing: How Analytics Are Transforming the Supply Chain and Improving Performance, Ananth Raman, Marshall Fisher, HBR Book Press, 2010*
4. *Data Mining: Concepts and Techniques”, Morgan Kaufmann Publication, 3rd Edition, 2011.*
5. *Decision Support and Business Intelligence Systems, Turban, E., Aronson, JE., Liang, T. Sharda R, Prentice Hall Publisher, 10 th Edition, 2011.*
6. *Data Science for Business – What you need to know about data mining and data-analytic thinking, Foster Provost, Tom Fawcett, O’ Reilly Media Publication, 2013 IDEA from CASEWARE.*

THIRD SEMESTER

BBA331 - FINANCIAL MANAGEMENT

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: Financial Management is a core course offered in the third semester to students across all specializations. The theme of financial management is structured around three decision making financial areas: investment- long term as well as working capital, financing and dividend policy. Course covers topics pertinent to profit-seeking organizations. The main purpose of the course is to imbibe analytical and decision-making skills in managing finance through application of theoretical questions and practical problems.

COURSE LEARNING OUTCOMES: On having completed this course student should be able to

1. Understand the principles and concepts of financial management.
2. Demonstrate the motives behind financial decision making.
3. Interpret the relevant theories and concepts of various practices of financial management.
4. Analyse the relationship among capital structure cost of capital, dividend decisions, and value of the business.
5. Evaluate and decide on the long term assets which are profitable to the business applying capital budgeting techniques

PEDAGOGY: This course uses multiple pedagogies like interactive lecture, article reviews, case analysis, and flip classes.

UNIT 1: INTRODUCTION TO FINANCIAL MANAGEMENT

6 Hrs.

Meaning of finance and financial management, Types of finance – public and private finance , classification of private finance – personal finance, business finance and finance of non-profit organization Importance and Scope of financial management, Approaches to finance function Relationship of finance with other business

functions, Objectives of financial management – profit maximization and wealth maximization - merits and criticisms Financial decisions, Internal relation of financial decisions, Factors influencing financial decisions Functions areas of financial management, Functions of a finance manager.

UNIT 2: SOURCES OF FINANCE AND CAPITALIZATION

9 Hrs.

Ownership securities – Equity shares, Preference shares, Deferred shares, no par stock/shares, Shares with differential rights, Sweat Equity Creditorship securities – Debentures – Zero coupon bonds, zero interest bonds, Callable bonds, Deep discount bonds Internal financing or ploughing back of profit – factors affecting ploughing back of profits – merits and demerits Loan financing – short term and long term sources. Meaning of capitalization – Theories of capitalization – cost theory and earnings theory. Over capitalization and under capitalization – causes – effects and remedies, Watered stock, over trading and under trading

UNIT 3: CAPITAL STRUCTURE

10 Hrs.

Meaning of capital structure and financial structure, principles of capital structure, optimum capital structure, determinants of capital structure, capital structure and EPS – practical problems. Point of indifference, capital gearing.

UNIT 4: COST OF CAPITAL AND LEVERAGES

12 Hrs.

Meaning of cost of capital, significance of cost of capital, components of cost of capital – computation of cost of capital – practical problems. Meaning of leverage, types of leverages – operating, financial and combined leverage, risk and leverage – practical problems.

UNIT 5: CAPITAL BUDGETING

10 Hrs.

Meaning of capital budgeting, Importance, Need, Time value of money, capital budgeting process, project appraisal by using traditional methods and modern methods Practical problems on payback period, rate of return, NPV method, Profitability index, IRR methods

UNIT 6: DIVIDEND POLICY DECISIONS**6 Hrs.**

Meaning, Kinds, Bonus shares – merits and demerits, determinants of dividend policy decisions

UNIT 7: MANAGEMENT OF WORKING CAPITAL**7 Hrs.**

Meaning of working capital, types of working capital, working capital cycle, adequate working capital, determinants of working capital, estimation of working capital. Management of cash – cash budget – practical problems. Management of inventory and debtors – theory only.

ESSENTIAL READING

1. *Gupta, S, K., Sharma,R.K., & Gupta ,N(2013).Financial Management. Kalyani Publishers.*

RECOMMENDED READING

1. *Khan, M.Y. & Jain, P.K. (2011). Financial Management. New Delhi, India. Tata McGraw Hill.*
2. *Chandra, P. (2008). Financial Management. New Delhi, India. Tata McGraw Hill Book Co.*
3. *Pandey,I.M.(2009). Financial Management. New Delhi, India. Vikas Publishing House.*

BBA335 - HUMAN RESOURCE MANAGEMENT**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: This course provides an overview of all the aspects of human resource management about how organizations interact with the environment, acquire, prepare, and develop their employees to meet the competitive challenges. The course focuses on providing general understanding of all the HR functions related to the employee life cycle management.

COURSE OBJECTIVES:

1. To understand the role and activities of human resource management function.
2. To explain the human resource management practices that can be adopted by organization in competitive business environment.
3. To assess the application of appropriate HR intervention in conjunction with organization need.

LEARNING OUTCOME:

1. To learn how different HR process and procedures are carried out in the organization.
2. To identify HR process that address organization requirements.
3. To apply HR concept in resolving issues faced by organization

UNIT 1: INTRODUCTION**6 Hrs.**

Level of Knowledge: Conceptual

Concept of HRM, Evolution of HRM, Role of Human Resource Manager, Functions of HRM, HR Structure and Concept of Strategic HRM.

UNIT 2: HUMAN RESOURCE PLANNING AND JOB ANALYSIS**10 Hrs.**

Level of Knowledge: Analytical

Concept & Importance of HRP; Different stages of HR Planning Process; Action Plans in case of shortage and surplus of workforce. Concept of Job Analysis, Importance and Benefits of Job Analysis, Job Analysis Process, Job Description, Job Specification and other Job related concepts- Job Enrichment, Job Enlargement, Job Rotation, Flexi timing, Telecommuting and Ergonomics.

UNIT 3: RECRUITMENT**8 Hrs.**

Level of Knowledge: Analytical

Concept of Recruitment, Factors affecting Recruitments, Sources of Recruitment

UNIT 4: SELECTION& INDUCTION**8 Hrs.**

Level of Knowledge: Analytical

Definition and Importance of Selection, Stages involved in Selection Process, Types of Selection Tests and Types of Interviews. Meaning and Benefits of Induction, Content of an Induction Program.

UNIT 5: PERFORMANCE APPRAISAL & CAREER MANAGEMENT**12 Hrs.**

Level of Knowledge: Analytical

Purpose of Performance Appraisal, Trait, Behavioural and Result Methods of Performance Appraisals, Process of Performance Appraisal. Career Management Process, Models of Career Management, Role & Challenges of Career Development, Career Development Initiatives.

UNIT 6: TRAINING AND DEVELOPMENT**8 Hrs.**

Level of Knowledge: Analytical

Meaning and Importance of Training and Development Programs, Stages involved in Training Process, on-the Job and Off-the-Job Training & Development Methods.

UNIT 7: CONFLICT MANAGEMENT**8 Hrs.**

Level of Knowledge: Analytical

Meaning and Sources of Employee Grievance, Grievance Handling Systems, Meaning & Process of Collective Bargaining, Indiscipline, Settlement Machinery of Industrial Conflicts

ESSENTIAL READING

1. *Gary Desler, Biju Varkkey (2017). Human Resource Management. Fifteenth Edition. Pearson*

RECOMMENDED READING

1. *L M Prasad. (2018). Human Resource Management. Sultan Chand & Sons*
2. *K Aswathappa. (2019). Human Resource Management: Text & Cases. Mc Graw Hill Education (India) Private Limited.*
3. *Rao, S. (2018). Essentials of Human Resource Management & Industrial Relations: Text & Cases. New Delhi: Himalaya Publication.*
4. *Noe. Hollenbeck. Gerhart. Wright. (2019). 7th Edition. Fundamentals of Human Resource Management. Mc Graw Hill.*

BBA361 - MARKETING MANAGEMENT

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: The course examines managerial issues surrounding Marketing Management. It involves students in specific learning exercises that simulate 'real world' activities that marketing managers partake in on a regular basis.

COURSE OBJECTIVE: The course objective is to give students a broad knowledge of marketing, and how this knowledge gained would be used in planning, coordinating the principles of marketing and executing all the necessary activities in the exchange process. This will be achieved through:

1. Introducing the principles and concepts of marketing.
2. Examining the environmental factors that shape an organisation's activities.
3. Explaining how to develop a marketing mix that will achieve goals in the target markets.

LEARNING OUTCOME: After completing the course the students will be familiar with the activities involved in marketing management.

UNIT 1:

8 Hrs.

Level of Knowledge: Basic

Understanding markets & marketing process-What is marketing, scope of marketing, core marketing concepts ;marketing management philosophies, changes in business & marketing, company responses & marketers & marketers responses. Characteristics of new economy. Competition in today's marketing. Introduction to emerging market in third world.

UNIT 2:**8 Hrs.**

Level of Knowledge: Conceptual

Marketing mix: Developing marketing opportunities, value delivery process, market research and information system, consumer markets and consumer buyer behavior segmentation, targeting, positioning for competitive advantage, branding and packaging, rural marketing, Marketing Strategies for Market leaders, followers, competitor, etc

UNIT 3:**8 Hrs.**

Level of Knowledge: Analytical

Development of new product

New product development stages, categories of new product, reasons for launching new products and its failure. Product life cycle strategies.(New Service as product)

UNIT 4:**8 Hrs.**

Level of Knowledge: Analytical

Distribution decisions-marketing channels, structure, types and criteria of selecting a channel, wholesaling, retailing, and physical distribution. E – Marketing distribution.

UNIT 5:**8 Hrs.**

Level of Knowledge: Analytical

Pricing- Types of pricing, consideration and approaches, competitive strategies, attracting, attacking, retailing and growing customer.

UNIT 6:**10 Hrs.**

Level of Knowledge: Conceptual

Promotion- An overview. Advertising, sales promotion, personal selling and sales management, Public and customer relations, direct and online marketing, multilevel marketing-the new marketing model.

UNIT 7:**10 Hrs.**

Level of Knowledge: Conceptual

Marketing and society: Social responsibility and ethical issues in marketing. Global marketing program, the old and new economies. Demand side marketing. Legal issues in marketing, marketing skills, Brand marketing skills, CRM, Marketing in Indian Context .Marketing in 21st century

SKILL DEVELOPMENT

1. Identify any company and analyze its CRM activities
2. Analyze buying behavior of different segments
3. Activity for new product development

ESSENTIAL READING

1. *Kotler, Keller, Koshy, Jha (2014). Marketing Management, 13th Edition, Pearson publication.*

RECOMMENDED READING

1. *Kotler, Philip and Gary, Armstrong. (2012). Principles of marketing, Pearson publication*
2. *Evans, R. and Berman, Barry. (2012). Marketing in 21st century, Oxford publication.*
3. *W. D. Perreault, Jr., J.P Cannon, and E. J. McCarthy (2009). Basic Marketing: A Marketing Strategy and Planning Approach, 17th ed., Irwin/McGraw Hill.*
4. *Tong, H., & Taylor, R. J. (2008). Marketing lessons that will help shape the future. Journal of Marketing, 33 (2), 189-196.*
5. *Tong, H., & Taylor, R. J. (2008). Marketing lessons that will help shape the future.*

BBA351 - CORPORATE ACCOUNTING

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course is introduced to familiarize the students with accounting practices in relation to various business situations of corporate business houses. The course also provides practical knowledge on preparing annual financial statements of corporate houses.

COURSE OBJECTIVES:

1. To impart knowledge about maintenance of Books of Accounts of Corporate business houses.
2. Familiarize the students with the various aspects of corporate merger and acquisition such as valuation of good will and shares, Determination of consideration for merger and acquisitions with reference to Accounting Standards
3. Familiarize the students with the internal financial arrangements to be implemented to recover the companies undergoing loss for several years.

LEARNING OUTCOME:

1. Ability to prepare Annual financial statements of corporate business houses
2. Proper Understanding about the Accounting procedures with reference to Corporate merger and acquisitions
3. Practical knowledge about Internal Reconstruction of companies.

UNIT 1: SHARE CAPITAL -ISSUE OF SHARES

8 Hrs.

Level of Knowledge: Conceptual & Analytical

Meaning- Kinds of Shares and debentures, Recent developments in public issue of shares - Book building – process of book building in detail-Fixed price methods – Basic Problems on issue of Shares.

UNIT 2: VALUATION OF GOODWILL AND SHARES**15 Hrs.**

Level of Knowledge: Analytical

Features of goodwill- types of goodwill- Methods of valuing the goodwill – Arbitrary assessment, capitalization method, Purchase of past average profits method, Super profit method.

Valuation of shares : Intrinsic value method, Yield method and Earning capacity method.(theory and Basic problems)

UNIT 3: AMALGAMATION, ABSORPTION AND EXTERNAL RECONSTRUCTION 20 Hrs.

Level of Knowledge: Analytical

Amalgamation in the nature of Merger and purchase, Difference between Amalgamation and Absorption - Calculation of purchase Consideration under Different methods, Settlement of Purchase Consideration – Practical Problems on Amalgamation, Absorption and external restructuring. Closing the Books of Vendor Company and opening of books of purchasing company.

UNIT 4: INTERNAL RECONSTRUCTION**10 Hrs.**

Meaning, Forms of Reconstruction, Alteration of Capital and Capital Reduction - Internal Reconstruction Vs External reconstruction, Practical Problems

UNIT 5: ACCOUNTING STANDARDS AND IFRS**7 Hrs.**

Level of Knowledge: Conceptual

IFRS and Indian Accounting Standards

UNIT 7: INSURANCE CLAIMS**10 Hrs.**

Level of Knowledge: application

Estimation of loss and submission of insurance claims.

UNIT 8: ACCOUNTING FOR PRICE LEVEL CHANGES**5 Hrs.****RECOMMENDED TEXT**

1. Jain, S.P., & Narang, K.L. (2017). *Advanced Accounting, Volume II* Kalyani Publishers. New Delhi

BOOKS FOR REFERENCE

1. S Anil Kumar, V Rajesh Kumar and B Mariappa. (2014) *Corporate Accounting*. New Delhi: Himalaya Publishing House.
2. Gupta, R.L., & Radhaswamy, M. (2013). *Corporate Accounting*. New Delhi: Sultan Chand and Sons.
3. Shukla, M.C., Grewal, T.S., & Gupta, S.C. (2013). *Advanced Accounts (revised edi)* New Delhi: Jain Book Agency.
4. Sehgal, A., & Sehgal, D. (2012). *Advanced Accounting, 2*, New Delhi: Taxmann.
5. Monga, J.R. (2013). *Fundamentals of Corporate Accounting*, New Delhi : K.L Malik and Sons Pvt. Ltd,
6. Maheshwari, S.N., & Maheshwari, S.K. (2013). *Corporate Accounting (5th edi)*. New Delhi: Jain Book Agency.
7. Kaur, J. (nd). *IFRS: A Practical approach*. New Dehli: McGraw Hill.

BBA312 - SERVICES MARKETING

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: A service is a provider/client interaction that creates and captures value. Because a successful service provider-client relationship has a critical dependency upon a well- defined and functional relationship. This course will provide an overview of service management from an integrated viewpoint with a focus on customer satisfaction. The material will integrate operations, marketing, strategy, information technology and organizational issues.

COURSE OBJECTIVES:

1. To provide students with basic knowledge on management of services
2. To equip students with in-depth understanding of contemporary issues in services management
3. To enable students to design service management initiatives for different industries.

LEARNING OUTCOME:

1. Understand the & quot; state of the art & quot ; in service management strategies.
2. Develop an awareness of how information technology can enhance service firm's competitiveness.
3. Understand the process to deliver optimal service quality.
4. Understand the tools for analysing and optimizing the service experience.
5. Understand the operational processes for managing the service encounter to achieve internal and external customer satisfaction.
6. Understand the complexities associated with implementing change.

UNIT 1: INTRODUCTION TO SERVICE MARKETING

10 Hrs.

Understanding Services Phenomenon; Growth of Service Sector; Role of services the Economy; The concept of Services: Characteristics of services; Classification of services:

UNIT 2: MARKETING MIX IN SERVICE INDUSTRY**10 Hrs.**

Product in services, price, promotion, Place, process, people, physical evidence (concepts only). Knowledge of the Customer Involvement in Service Processes; Customer behaviour in Service Settings; Targeting Customers, managing relationships and building Loyalty, Flower of services and new service development

UNIT 3: PLANNING AND MANAGING SERVICE DELIVERY**10 Hrs.**

Creating delivery systems in place, GAPS Model, Enhancing Value by Improving Quality and Productivity; SERVQUAL, Service Blueprint, Balancing Demand & Capacity; Managing customer's reservations & waiting list configurations.

UNIT 4: TRAVEL & TOURISM SERVICES**10 Hrs.**

Introducing to Tourism Marketing- Concept & Nature of Tourism; Significance & Impact of Tourism, Evolution of Tourism, Tourism Market Segmentation; Tourism marketing Mix- Introduction to Travel services, Medical tourism.

- i. Role of Travel Agencies & Travel Organization
- ii. Tour Operations
- iii. Airline Service Marketing
- iv. Road & Rail service
- v. Travel by Sea

UNIT 5: HOTEL AND HOSPITALITY SERVICES**5 Hrs.**

Introduction to Hotel Industry: Hotels; Evolution of Hotel Industry; Development of Hotels- Facilities- the Guest Cycle- Grades of hotels: Meaning of Hospitality- Marketing Mix of Hospitality Industry

UNIT 6: MARKETING OF BANKING & INSURANCE SERVICES**5 Hrs.**

Marketing of Insurance services

- i. Life Insurance - Whole life. Term Insurance, Endowment insurance, survivorship Insurance
 - ii. General insurance - Marine insurance, Fire insurance, Building insurance, Motor insurances
 - iii. Miscellaneous Insurance - Personal accident, Burglary & theft. Workmen's compensation, Fidelity guarantee. Medi-claim, Policy for jewellery, Videsh yatra policy
- Marketing of Banking Services: A brief insight into Indian Banking scenario; Issues in Banking; Types of Banking Services- Marketing of services. Market research in Indian Banks.

UNIT 7: HEALTHCARE SERVICES**10 Hrs.**

Hospital service Management - Introduction to Hospitals; classification of hospitals Development of Hospitals; Latest development in the hospital classification, marketing the medical transcription services. Medical tourism.

LEARNING ACTIVITIES

Lecture led discussions, Case studies, classroom debates/discussions, role plays, group projects, research papers, videos etc.

ASSESSMENT

Grading in the course will be dependent on CIAs (20%), Mid Term (25%), End Term (50%) and attendance (5%). CIAs are opportunities to engage in the course and learn continuously as the course progresses, and will have multiple components.

CIA COMPONENTS

- **Multiple Choice Quiz (10 Mks)**

This component tests familiarity and understanding the content of the course. Students who regularly attend classes and read the text and other relevant materials will be able to do well in the Quiz.

- **Article Review (10 Mks)**

The purpose of article review is the active participation in the class and developing analytical and critical thinking on various contemporary topics of the course. This is achieved through looking out for articles related to the assigned topic/areas in library and online research, reading through it and preparing a summary about it for classroom

- **Individual Writing Assignments (20 Mks)**

The objective is to develop writing and research skills of the students. You are required to follow APA format for any referencing. General rubrics for assessing essays will be followed for grading purpose.

- **Group Projects (20 Mks)**

Group projects will involve working with your peers outside of class on a specific project. You will be asked to study an organization and the HR issues is having to dealt with. You have to suggest strategies they can adopt to resolve these issues.

PRESCRIBED TEXT

1. *Rao, K. R. (2010). Services Marketing. New Delhi: Pearson Education.*

REFERENCES

1. *Chatterjee, J. (2010). Services Management. New Delhi: Pearson Education.*
2. *Christopher Lovelock, J. J. (2010). Services Marketing. New Delhi: Pearson Education.*
3. *K. Douglas Hoffman, J. E. (2010). Services Management. New Delhi: Pearson Education.*
4. *Rao, K. R. (2010). Services Marketing. New Delhi: Pearson Education.*
5. *Steve Baron, K. H. (2010). Services Marketing. New Delhi: Pearson Education.*
6. *Valarie A. Zeithaml, M. J. (2010). Services Marketing. New Delhi: Tata McGraw Hill.*

FOURTH SEMESTER

BBA431 - COST AND MANAGEMENT ACCOUNTING

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This subject is included in the syllabus with an intention to equip the students with adequate knowledge about the various aspects of Cost and Management Accounting and facilitate them to learn different methods and techniques used in the ascertainment of cost of various products and services by different types of Industries. It further equips the students with techniques of analysing financial and cost statements and provides data to Management for decision making.

COURSE OBJECTIVE:

1. To equip students with knowledge of how to ascertain of cost of products and services provided by different types of Industries.
2. Equips the students with techniques of analysing financial and cost statements and provides data to Management for decision making.

LEARNING OUTCOMES:

1. Adequate knowledge on how to ascertain the cost of various products and services offered by different types of Industries.
2. The ability to analyse financial statements and provides data to Management for decision making.
3. Sufficient knowledge about Budgetary control

UNIT 1: INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING

20 Hrs.

Definitions, features, objectives, functions, scope, advantages and limitations. Relationship and differences between Cost accounting, Management accounting and Financial accounting. Cost Concepts-Cost classification – Elements of cost - Preparation of cost sheet and quotation.

Material Cost: direct and indirect material cost, Inventory control techniques-stock levels, EOQ, ABC analysis. Issue of materials to production- pricing methods-FIFO, LIFO and Average methods.

Labor cost: direct and indirect labour cost-methods of payment of wages including incentive plans -Halsey and Rowan plans, Tailors Piece Rate method.

Overheads: features, classification, methods of allocation and apportionment of overheads, primary and secondary distributions (Repeated & step ladder method only).

UNIT 2: MARGINAL COSTING

14 Hrs.

Level of Knowledge: Analytical

Marginal Costing-Meaning - Importance - Marginal Cost Equation - Difference between Marginal costing and Absorption costing - Applications of Marginal costing -Break Even Analysis-Meaning and Importance - Break even chart and different formulas (Simple problems)- Cost Volume Profit Analysis- Margin of Safety-Angle of Incidence- Problems in Marginal costing.

UNIT 3: BUDGETARY CONTROL

10 Hrs.

Budgets - Meaning and importance - Budgetary Control-Meaning and Importance-Types of Budgets, practical problems - Flexible Budget and cash Budget,

UNIT 4: FINANCIAL STATEMENT ANALYSIS

14 Hrs.

Level of Knowledge: Analytical

Comparative Income Statements and Balance Sheets, Common size Income Statements and Balance Sheet analysis, Trend Analysis, Simple Problems.

Ratio Analysis – Introduction, Classification & Interpretation of Ratios, Problems on ratio analysis.

UNIT 5: CASH FLOW STATEMENT**12 Hrs.**

Introduction, Concept of Cash, Sources of cash flow Cash from operation, cash from Financing and cash from investment, Inflow and outflow of cash. Preparation of cash flow statements- practical problems.

UNIT 6: MANAGEMENT REPORTS**5 Hrs.**

Level of Knowledge: Conceptual

Management Reporting – Procedures and Utility, Sample Reports

ESSENTIAL READING

1. *Arora, M.N (2016). Cost and Management Accounting, New Delhi: Himalaya Publishing House.*

RECOMMENDED READING

1. *Jain, S.P., & Narang, K.L. (2014). Cost Accounting. New Delhi: Kalyani Publishers.*
2. *Kishor, R.M. (2013). Cost and Manegement Accounting. New Delhi: Taxman Allied Services.*
3. *Pillai, R.N.S. (2013). Cost Accounting. New Delhi: Sultan Chand.*
4. *Arora, M.N. (2013). Cost and Management Accounting. New Delhi: Vikas Publications*
5. *Arora, M.N (2016). Management Accounting, New Delhi: Himalaya Publishering House*
6. *Lal, J. (2013). Cost Accounting. New Delhi: Tata Mcgraw Hill Education*

BBA432 - ENTREPRENEURSHIP DEVELOPMENT**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: Entrepreneurship is a necessary ingredient for stimulating economic growth and employment opportunities. In the developing world, successful small businesses are the primary engines of job creation, income growth. This course intends to promote in-depth knowledge source for an intending practitioner or entrepreneur in the field of entrepreneurship. This course earnestly attempts to present the various aspects of entrepreneurship and what a prospective business visionary must know before setting out on a modern or business wander.

COURSE OBJECTIVE:

1. To develop the skills required to prepare a Business Plan
2. To develop and strengthen entrepreneurial quality and motivation
3. To enlarge the supply of entrepreneurs for rapid industrial development
4. To provide knowledge and information about the source of help, incentives and subsidies available from government to set up the project
5. To impart information about the process, procedure and rules and regulations for setting up a new project

COURSE LEARNING OUTCOME:

1. Familiarize the students with competencies and capability related to Entrepreneurship.
2. Identify and analyses the business opportunity in current business scenario.
3. Create a business plan for an entrepreneurial venture.

UNIT 1: INTRODUCTION TO ENTREPRENEURSHIP**12 Hrs.**

Level of Knowledge: Conceptual

Evolution of the Concept of Entrepreneurship; Theories of Entrepreneurship- Innovation Theory, Harvard School Theory, Theory of High Achievement, Theory of Profits, Theory of Adjustment of Price-

Entrepreneurship Today; Types of Entrepreneurs; Intrapreneurship; Difference Between a Manager and an Entrepreneur; Entrepreneurial Competencies; Capacity Building for Entrepreneurs; Women's Entrepreneurship, Challenges Faced by Women Entrepreneurs; Characteristics of a Family-owned Business in India; Various Types of Family Businesses; Challenges Faced by Family-owned Businesses.

UNIT 2: ENTREPRENEURSHIP DEVELOPMENT IN INDIA

12 Hrs.

Level of Knowledge: Conceptual

Entrepreneurial Environment; Global Entrepreneurship Environment; Business Climate in India; Environmental Factors Affecting Entrepreneurial Growth; Creating a Favourable Environment for Entrepreneurship; Models of Entrepreneurial Development; The Process of Entrepreneurial Development; Role and Importance of Micro, Small, and Medium Enterprises; Concepts and Definitions of MSME; The MSMED Act, 2006; Government Policy Initiatives; Current Schemes for MSME; Problem Faced by MSME Sector; Role of Clusters in Promoting MSME.

UNIT 3: CREATIVITY & INNOVATION

12 Hrs.

Level of Knowledge: Analytical

The creative process, Search for Business ideas, Selection of Product/Service, Product innovation; Services Industries-Human side of an enterprise; Identification of Business Opportunities; Mobility of Entrepreneurs; Geographical Mobility of Entrepreneurs; Occupational Mobility; Business Opportunities in India; Models for Opportunity Evaluation; The RAMP Model ; Mullins's Seven-domain Framework

UNIT 4: BUSINESS PLANS

12 Hrs.

Level of Knowledge: Analytical

Purpose of a Business Plan; Contents of a Business Plan- Management Summary; Marketing Plan; Operations Plan; Financial Plan; Procedure for Setting Up an Enterprise; Selection of a Project; Decide on the Constitution Obtain Registration; Obtain Clearances from Departments as Applicable; Arrange for Land/Shed; Arrange for

Plant and Machinery; Arrange for Infrastructure; Prepare Project Report; Apply for and Obtain Finance; Implement the Project and Obtain Final Clearances.

UNIT 5: INSTITUTIONAL SUPPORT TO ENTREPRENEURS

12 Hrs.

Level of Knowledge: Analytical

Institutions Supporting Business Enterprises; Central-level Institutions; National Board for Micro, Small, and Medium Enterprises (NBMSME) The Khadi and Village Industries Commission (KVIC) The Coir Board MSME-DO; National Small Industries Corporation (NSIC); National Science and Technology Entrepreneurship Development Board (NSTEDB) National Productivity Council (NPC) Entrepreneurship Development Institute of India (EDI) National Research Development Corporation of India (NRDCI) National Entrepreneurship Development Institutes; State-level Institutions ; State Directorate of Industries and Commerce ; District Industries Centres (DIC) ; State Financial Corporation (SFC); State Industrial Development Corporation (SIDC) State Industrial Area Development Board (SIADB); Other Institutions National Bank for Agriculture and Rural Development (NABARD) Housing and Urban Development Corporation (HUDCO); Technical Consultancy Organization (TCO); Small Industries Development Bank of India (SIDBI) ; Export Promotion Councils (EPCs) Industry Associations Non-Governmental Organization (NGOs) Business Incubators.

UNIT 6: PROJECT MANAGEMENT & FINANCING

15 Hrs.

Level of Knowledge: Analytical

Introduction, Project Manager ; Project Life Cycle , Project Scheduling -Gantt Charts, Network Techniques ; Project Management Software; Capital Budgeting; Generating an Investment Project Proposal; Project Analysis; Market Analysis, Technical Analysis, Financial Analysis, Economic Analysis, Project Evaluation and Selection ; The Payback Period; Accounting Rate of Return (ARR) Net Present Value (NPV) Internal Rate of Return (IRR) ; Benefit-Cost Ratio (BCR) Project Financing Equity Financing; Angel Investing ; Debt Financing ; Miscellaneous Sources; Project Implementation Phase; Capital Structure and Cost of Capital; Detailed Project Report; Ecological Analysis

ESSENTIAL READING

1. *Poornima M Charanthimath (2018) "Entrepreneurship Development and Small Business Enterprises", 2nd Edition, Pearson Publication.*

RECOMMENDED READING

1. *David, H. (2013). "Entrepreneurial Development" (5th edition), Prentice Hall*
2. *Desai, V. (2014). The Dynamics of Entrepreneurial Development and Management (6th edition). Himalaya Publishing House.*
3. *Gupta, C.B., &Srinivasan, N.D. (2012) Entrepreneurship Development. New Delhi Sultan Chand & Sons.*
4. *Robert D Hisrich, Mathew J. Manimala, Michael Peter, Dean A Shepherd. (2013) "Entrepreneurship" (8th edition). Tata McGraw Hill*

BBA461 - RESEARCH METHODOLOGY**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: To give basic concepts of research and its process. To make the students aware of sampling design, data collection and analytical tools and its role in objectivity of research Understanding of Research report as the output of a research work and systematized knowledge. The course is designed to provide experiential learning in all the modules.

COURSE OBJECTIVE:

1. To provide students with the tools and skills required to understand research terminology and assess published research;
2. To identify the types of methods best suited for investigating different types of problems and questions;
3. To develop research questions that are based on and build upon a critical appraisal of existing research;
4. To design a research proposal
5. To begin initial preparations for embarking on a new research project.

COURSE LEARNING OUTCOME:

1. To make them well versed with the various methodologies of research and statistical applications in business decisions prepare a project proposal (to undertake a project)
2. To organize and conduct research (advanced project) in a more appropriate manner.

UNIT 1: INTRODUCTION TO BUSINESS RESEARCH**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Definition, Objectives of research, Characteristics of research - Scientific Method, Types of research, Criteria for Good research, Business research in organizations - Decision Support, Ethics in research.

UNIT 2: RESEARCH PROCESS AND CONCEPTS IN RESEARCH**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Research Process - Steps in research, Research designs for Experimental, Explorative and Explanatory.
Concepts - Methodology and Methods, Theory, concepts, constructs variables, Deductive and inductive logic.

UNIT 3: FORMULATION OF RESEARCH PROBLEM AND HYPOTHESES**10 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Identifying and formulating research problem, Diagnosis of symptoms and problem. Setting research objectives. Doing review of literature – purpose, methods. Hypothesis – Meaning, Purpose, Sources, characteristics of hypotheses, types of hypothesis, testing of hypothesis.

UNIT 4: MEASUREMENT SCALES & SAMPLING TECHNIQUES**10 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Measurement – Types of Scales, Scaling techniques, characteristics of good instrument, and errors in measurement, Reliability and validity of research instruments. Sampling - Significance of sampling, Concepts, Steps in sampling, Criteria for good sample, Methods of sampling, determining sample size.

UNIT 5: DATA COLLECTION**8 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Data sources - primary and secondary data, Data Collection methods- Survey, observation, Interview, focus group technique. Data collection instruments - Questionnaire, schedule, electro-mechanical devices.

UNIT 6: DATA ANALYSIS**20 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Data processing – Editing, coding, tabulation, pictorial and graphical presentation of Data, problems in processing, transcribing. Selection of statistical methods – based on objectives, type of scale. Overview of types of statistical analysis – descriptive, validation and inferential tools. Overview of Non-parametric and Qualitative data analysis tools. Statistical Techniques for analysis Statistical Testing: Parametric vs. Non parametric, Logic, Confidence Intervals, Power of the test, Normal Curve, Normality Test, Homogeneity of variance, Bootstrapping T-Test: One Sample, Independent Sample, Paired Sample. Analysis of variance: General

UNIT 7: REPORT WRITING AND PRESENTATION OF RESULTS**7 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Classification and tabulation, Graphical representation, Research presentation, Types of report - Research proposal, research report. Format of a report- Layout, Standards (Introduction to APA formatting), Precautions.

ESSENTIAL READING

1. *Gupta, S. K., & Raugi, P. (2014). Research Methodology: Methods Tools and Techniques (3 ed.). Ludhiana: Kalyani Publication.*

RECOMMENDED READING

1. *Bryman, Alan and Bell, Emma (2011), Business Research Methods, 3/e, Oxford University Press*
2. *Chawla, D., & Sondhi, N. (2011). Research Methodology: Concepts and cases. New Delhi: Vikas Publishing House*
3. *Gupta, S. L and Gupta, Hitesh (2012), Business Research Methods, McGraw Hill Education (India) Private Limited, New Delhi*
4. *Krishnaswamy, K.N., Sivakumar, A.I., Mathirajan, M (2007), Management Research Methodology, Pearson, New Delhi*
5. *Kothari, C. R. (2009). Research Methodology Methods & Techniques (2 ed.). New Delhi: Vishwa Prakashan.*
6. *Krishnaswami, O., & Ranganatham, M. (2013). Methodology of Research in Social Sciences. Mumbai: Himalaya Publishing House.*
7. *Majhi, P. R., & Khatua, P. K. (2013). Research Methodology (Concepts, Methods, Techniques and SPSS). Mumbai: Himalaya Publishing House.*
8. *Srivastava. T. N and Rego Shailaja (2012), Business Research Methodology, Tata McGraw Hill Education Private Limited, New Delhi*

BBA435 - INTERNATIONAL BUSINESS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: The course focuses on: a) history, evolution, growth & development of International Business. b) Reasons for Existence of MNC s and their strategies c) Government policies & Procedures applicable for International Business. The Course is designed to impart sound knowledge about International Business operations through lectures, seminars, case studies & Group Discussions etc. to make learning challenging.

COURSE OBJECTIVES: Growing importance of globalization makes it mandatory for every budding manager to be well versed with the dynamics of International business. This course intends to familiarize the students of management with the advanced knowledge of global business scenario from an Indian perspective.

COURSE LEARNING OUTCOME: After completion of the Course students will be able to have an awareness about the foundations of basis of trade and gains from trade, opportunities and challenges involved, and support and strategy parameters of International Business from an Indian perspective.

UNIT 1: INTRODUCTION TO INTERNATIONAL BUSINESS**10 Hrs.**

Level of Knowledge: Basic / Conceptual

Evolution of international business, nature of international business, need & importance of International Business, stages of internationalization, (EPRG) approaches to international business, theories of international business – Mercantilism, Absolute Advantage, Comparative Advantage, Factor Endowment, Competitive Advantage. Tariff and non-tariff and barriers.

Introduction to Political, Economic, Social-Cultural & technological environment of international business.

UNIT 2: MODES OF ENTERING INTERNATIONAL BUSINESS**10 Hrs.**

Level of Knowledge: Basic / Conceptual

International business analysis- modes of entry- exporting (direct and indirect) licensing, franchising, contract manufacturing, management contracts, turnkey projects, Joint ventures- Mergers and Acquisitions- Foreign direct investment -Comparison of different modes of entry

UNIT 3: GLOBALIZATION**5 Hrs.**

Level of Knowledge: Basic / Conceptual

Meaning- Definition and Features-Globalization, -Advantages and Disadvantages, Socio- Cultural, Political & Legal and Economic Implications, Globalization and India. GATT and WTO

UNIT 4: MNCS AND INTERNATIONAL BUSINESS**12 Hrs.**

Level of Knowledge: Basic / Conceptual

Definitions & Distinction among Domestic Companies, International company, MNC, Global Company and TNC, Merits and Demerits, MNC s and India. OECD Guidelines for Multinational Enterprises. a) Concepts and Principles b) General Policies c) Disclosure, d) Employment and Industrial Relations, e) Environment, f) Combating Bribery, g) Consumer Interests h) Science and Technology. i) Competition., j) Taxation.

UNIT 5: INTRODUCTION TO INTERNATIONAL FINANCE**5 Hrs.**

Level of Knowledge: Basic / Conceptual

Trade and Balance of payment, Current items, Capital Items, Disequilibrium of balance of payments and rectification, components of International financial systems, Forex market, Euro currency market, IMF and International Monetary system. Exchange Rate determination (Concept only), Capital account convertibility.

UNIT 6: EXPORT FINANCING AND INTERNATIONAL PAYMENTS**4 Hrs.**

Level of Knowledge: Basic / Conceptual

Export credits, Method and sources of credit, Methods of payments in International Business, Financing techniques, ECGC, Exim bank and their role.

UNIT 7: EXPORT IMPORT DOCUMENTATION & EXPORT PROMOTION**4 Hrs.**

Level of Knowledge: Basic / Conceptual

Important Trade Terms in International Trade: [L^U][S^{EP}] [Introduction: CIF, F.O.B, F.O.B Contract with additional services, F.O.B Contract (Buyer contracting with carrier), FAS, EX SHIP & Arrival Contracts, C& F, EX WORKS & EX STORE CONTRACTS, FOR CONTRACTS, SALE OF A CARGO & EX- QUAY Contracts. Export and import procedure, document required their relevance

Assistance and Incentives to Indian Exporters, Export Promotion measures/Schemes: Market development assistance, Cash compensatory scheme, duty drawback scheme, Replenishment licensing scheme, Duty exemption scheme.

Role and functions of DGFT, IIFT, RBI, EXIM Bank, ECGC & EPCs IN PROMOTING INTERNATIONAL TRADE.

FDI Trends, Rules and regulations. Highlights of Latest EXIM Policy.

RECOMMENDED BOOK

1. *Rakesh, M. J. (2013). International Business, New Delhi, Oxford University Press*

REFERENCE BOOKS

1. *Laura, H. & Werhane, P. H. (2013). The Global Corporation, Routledge Taylor & Francis Group, New Delhi*
2. *John, B. C., & Parboteeah, K. P. (2011). International Business: Strategy and the Multinational Company, Routledge Taylor & Francis Group, New Delhi*
3. *Varma, S. (2013). International Business, New Delhi, Pearson Publication*
4. *Charles, H. (2011). International Business: Text & Cases, New Delhi, Tata McGraw Hill*
5. *Warren, J. K. (2013). Global Marketing Management, New Delhi, Prentice Hall*

BBA433 - PROGRAMMING USING PYTHON FOR ANALYTICS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE OBJECTIVES/OUTLINE: The objective of this course is to provide comprehensive knowledge of python programming paradigms required for Data Science.

COURSE OUTCOMES:

1. Demonstrate the use of built-in objects of Python
2. Demonstrate significant experience with python program development environment
3. Implement numerical programming, data handling and visualization through NumPy, Pandas and Matplotlib modules.

UNIT 1: INTRODUCTION TO PYTHON**9 Hrs.**

Structure of Python Program-Underlying mechanism of Module Execution-Branching and Looping-Problem Solving Using Branches and Loops-Functions - Lists and Mutability- Problem Solving Using Lists and Functions

Lab Exercises

1. Demonstrate usage of branching and looping statements
2. Demonstrate Recursive functions
3. Demonstrate Lists

UNIT 2: SEQUENCE DATATYPES AND OBJECT-ORIENTED PROGRAMMING**9 Hrs.**

Sequences, Mapping and Sets- Dictionaries- - Classes: Classes and Instances-Inheritance Exceptional Handling-Introduction to Regular Expressions using “re” module.

Lab Exercises

1. Demonstrate Tuples and Sets
2. Demonstrate Dictionaries
3. Demonstrate inheritance and exceptional handling
4. Demonstrate use of “re”.

UNIT 3: USING NUMPY**8 Hrs.**

Basics of NumPy-Computation on NumPy-Aggregations-Computation on Arrays Comparisons, Masks and Boolean Arrays-Fancy Indexing-Sorting Arrays-Structured Data: NumPy’s Structured Array.

Lab Exercises

1. Demonstrate Aggregation
2. Demonstrate Indexing and Sorting

UNIT 4: MODULES**8 Hrs.**

Importing module - Math module - Random module - Packages – Composition - Input- Output - Printing on screen - Reading data from keyboard - Opening and closing file - Reading and writing files

UNIT 5: FUNCTIONS EXCEPTION HANDLING**8 Hrs.**

Exception - Exception Handling - Except clause - Try? finally clause - User Defined Exceptions

UNIT 6: DATA MANIPULATION WITH PANDAS – I**9 Hrs.**

Introduction to Pandas Objects-Data indexing and Selection-Operating on Data in Pandas- Handling Missing Data-Hierarchical Indexing - Combining Data Sets

Lab Exercises

1. Demonstrate handling of missing data
2. Demonstrate hierarchical indexing

UNIT 7: DATA MANIPULATION WITH PANDAS –II**9 Hrs.**

Aggregation and Grouping-Pivot Tables-Vectorized String Operations -Working with Time Series-High Performance Pandas-eval () and query ()

Lab Exercises

1. Demonstrate usage of Pivot table
2. Demonstrate use of eval() and query()

ESSENTIAL READING

1. *Jake VanderPlas, Python Data Science Handbook - Essential Tools for Working with Data, O'Reilly Media,Inc, 2016*
2. *Zhang.Y, An Introduction to Python and Computer Programming, Springer Publications,2016*

BBA412 - INDIAN FINANCIAL SYSTEM**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: This course is to make students familiarize with various aspects of Indian financial system. This will provide the students with an overall understanding of various components of Indian financial system.

COURSE OBJECTIVES:

1. To study about the money market and capital market operations
2. To understand the functions of various financial institutions.
3. To study about various financial services
4. To understand about international financial markets.
5. To understand about the regulatory bodies.

LEARNING OUTCOME: Students will be able to comprehend each and every updates in the financial system with its impacts.

LEVEL OF KNOWLEDGE: As a beginner the student will get exposure on the financial instruments and intermediaries and helps to get updated with the current affairs.

UNIT 1: INTRODUCTION TO FINANCIAL SYSTEM**10 Hrs.**

Level of Knowledge: Basic

Meaning-Structure- Functions-Components of financial System-Financial system and economic development- Reforms in Financial Sector in India

UNIT 2: CAPITAL MARKET**10 Hrs.**

Level of Knowledge: Conceptual

Meaning –Classification- Functions- Types-Primary Market-Secondary market-functioning of various stock exchanges-NSE, BSE, OTCEI- Financial instruments in capital market- Long term loans market- Derivatives Market- Government Securities market- Capital market scams-SEBI-Reforms in capital markets

UNIT 3: MONEY MARKET**12 Hrs.**

Level of Knowledge: Conceptual

Meaning-Significance-Structure-Features of money market—Money market Instruments-Reforms in money market-RBI-Functions-Monetary Policy-Credit Policy

UNIT 4: FINANCIAL INSTITUTIONS**13 Hrs.**

Level of Knowledge: Conceptual

Meaning- Functions-Banking Institutions-Scheduled commercial banks and scheduled cooperative banks-Non Banking Institutions-NBFCs and Development Finance Institutions-Insurance and Housing Finance Companies -IRDA

UNIT 5: FINANCIAL SERVICES**14 Hrs.**

Level of Knowledge: Conceptual

Meaning-Types-Leasing- Hire purchase- Mutual funds- Factoring -Credit rating- Venture Capital-Recent developments in financial services industry, GIFT.

UNIT 6: INTERNATIONAL FINANCIAL MARKETS**11 Hrs.**

Level of Knowledge: Conceptual

Nature, Organization and Participants- Offshore Financing Instruments- Foreign Exchange market – International Financial Tech Cities

ESSENTIAL READING

1. Pathak, B. (2013). *Indian Financial System*. New Delhi: Pearson education.

RECOMMENDED READING

1. Desai, V. (2010). *Indian Financial System*. Mumbai: Himalaya publishers.
2. Gordon, N. (2014). *Indian Financial System*. Mumbai: Himalaya publishers.
3. Khan, M.Y. (2009). *Indian Financial System*. New Delhi: McGraw-Hill.
4. Sharma, G. (2014). *Indian Financial System*. Ludhiana: Kalyani publishers.
5. Singh, P. (2010). *Dynamics of Indian Financial System: Markets, Institutions and Services*, ANE Books

FIFTH SEMESTER

BBA532 – TAXATION

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course is introduced as part of BBA program to give an overall idea about the theoretical and practical aspects of direct and indirect taxes in India with special reference to tax management. The content of the course is arranged in such a manner that it gives an outline of the law and practice of tax laws in an analytical and simple way.

COURSE OBJECTIVE:

1. To equip the students with proper understanding about law and practice of Income Tax in India
2. To impart the knowledge and understanding about law and practice of Goods and Service Tax in India.
3. To comprehend with tax laws and its application in taxation management
4. To connect the students with law and practice of Customs Duty in India

LEARNING OUTCOME:

On completion of this course students will be equipped with proper understanding and knowledge about the following aspects of tax management.

1. Ability to understand apply the law and practice of Income Tax in India
2. Practical knowledge to make saving and investments in order to minimize income tax liability.
3. Analyze and understand the provisions of Goods and Service Tax in India.
4. Correlate with rules and regulations of Customs Duty in India in real life scenario

UNIT 1: INTRODUCTION TO TAXATION**7 Hrs.**

Level of Knowledge: Conceptual

Legal enactments governing Income Tax in India, An over-view of basic Concepts- Assesse, Person, Assessment Year, Previous Year, Agricultural Income, Income, GTI, Total Income, Average Rate Of Tax. Determination of residential status, Kinds of income, incidence of tax.

Tax free incomes. Capital and Revenue Expenditure. Comparison between Tax structure in India and other countries. (Self-study)

UNIT 2: INCOME FROM SALARY**12 Hrs.**

Level of Knowledge: Analytical

Chargeability, Treatment of Various Allowances, Perquisites, and their Valuation, Treatment of Provident Fund, profit in Lieu of salary, Deductions from Gross Salary (Practical Problems). Retirement Benefits Computation of taxable salary.

UNIT 3: INCOME FROM HOUSE PROPERTY**6 Hrs.**

Level of Knowledge: Analytical

Chargeability, annual value and its determination, deemed ownership deductions from annual value, Computation of taxable income under the head house property (theory with problems)

UNIT 4: PROFITS AND GAINS OF BUSINESS AND PROFESSION**10 Hrs.**

Meaning of Business and Profession, Incomes Chargeable under this head

Computation of Taxable Income from business (Sole proprietorship firms) and profession.

UNIT 5: CAPITAL GAINS**8 Hrs.**

Meaning of important terms, Short term and Long term capital gain, cost of acquisition of capital assets, Computation of capital gains, exemptions from LTGC only deductions u/s 54, 54B, 54EC and 54F(theory with simple problems)

UNIT 6: INCOME FROM OTHER SOURCES, DEDUCTIONS AND GROSS TOTAL INCOME**8 Hrs.**

Incomes taxable under income from other sources, deductions allowed (applicable only to individuals) Section 80C to 80U, Computation of GTI

UNIT 7: GOODS AND SERVICES TAX (GST)**12 Hrs.**

Overview of GST, Dual structure, GST council, Definition of Supply, Levy and Tax and Input tax credit. (Theory with simple problems)

UNIT 8: CUSTOMS DUTY**12 Hrs.**

Basic concepts, Types of customs duty, Assessable value and computation of total customs duty, Baggage and Courier.

ESSENTIAL READING

1. *Gaur, V.P. & Narang, B.K. (2018). Income Tax Law and practice. New Delhi, Kalyani Publishers.*
2. *Datey V S (2018), GST Laws and Practice with Customs and Foreign Tax Practice (FTP), New Delhi, Taxmann Publications.*

RECOMMENDED READING

1. *Mehrothra, H.C., & Goyal, S.P. (2018). Income Tax Law and practice, (Latest edition). Sahitya Bhavan Publishers.*
2. *Prasad, B. Income Tax Law and practice (2018). New Age Publications.*
3. *Singhania, (2018) Income tax law and practice , Taxman publishers, New Delhi.*

BBA533 - STRATEGIC MANAGEMENT

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: An Organization consists of different departments and processes. Managers at all level must understand how a company's departments and processes "fit" together to achieve its goal. It focuses on all the functional areas of business and presents a cohesive strategic management model from a strategic perspective. The subject provides an insight on the strategy adopted by the companies in response to environmental change. The course provides a comprehensive and integrated presentation of current strategic management thinking in a clear and succinct format.

COURSE OBJECTIVE:

1. To learn the fundamentals of strategic management using the case method.
2. To understand the fundamental principles & interrelationships among business functions such as: R & D, Production, Marketing, Customer Service, finance, human resources and Information Technology
3. To understand the interrelationships of business to individuals, other organizations, government and society.

COURSE LEARNING OUTCOME:

1. To explain the strategy adopted by the companies in response to environmental changes
2. To understand the manner in which strategic and competitive advantage is developed.
3. To study various methods and techniques for internal analysis.
4. To observe how positioning of the firm in the industry help to determine the competitive advantage.
5. To explore the tools and technique for strategic analysis o understand different business strategies
6. To study the interrelationship of formulation and implementation.
7. To examine how strategic management contributes to effective corporate governance of an organization
8. To study the importance of values and ethics in Business

UNIT 1: STRATEGIC PLANNING AND STRATEGIC MANAGEMENT**6 Hrs.**

Level of Knowledge: Conceptual

Defining strategy- levels at which strategy operates- approaches to strategic decision making, the strategic management process- Strategic intent: Vision, mission and objectives

UNIT 2: ENVIRONMENTAL AND INDUSTRY ANALYSIS**11 Hrs.**

Level of Knowledge: Analytical

The organizations environment- External and internal environment, components of external and internal environment- Environment scanning- Organizations responses to the environment, A framework for industry analysis, Michael porter's analysis- usefulness of Industry analysis- Competitive analysis: Forces shaping competition in an industry- interpreting the Five force models- Strategic group, and competitor analysis- Internal analysis: Resource based strategy- the resource based view, Resources- capabilities and competencies- approaches to internal analysis

UNIT 3: STRATEGY FORMULATION AND CHOICE**6 Hrs.**

Level of Knowledge: Analytical

Corporate level strategy: Introduction- The balanced score card- Grand strategies- Growth/Expansion strategy- Diversification Strategy- Stability strategy- Retrenchment strategy- combination strategy, BCG matrix, Global Strategies for corporates– Objective and modes of entry

UNIT 4: CORPORATE RESTRUCTURING**7 Hrs.**

Level of Knowledge: Conceptual

The concept of corporate restructuring- the process of restructuring- mergers and acquisition- takeovers- cooperative strategies- Reasons for strategic alliances- risks and costs of strategic alliances

UNIT 5: STRATEGY IMPLEMENTATION AND FUNCTIONAL STRATEGIES **8 Hrs.**

Level of Knowledge: Analytical

Issues in strategy implementation- Activating strategy and resource allocation- strategy-structure relationship- the functional structure- divisionalisation- Functional level strategies: Operational strategy, financial strategy, marketing strategy and Human resource strategy

UNIT 6: BEHAVIOURAL IMPLEMENTATION **9 Hrs.**

Level of Knowledge: Analytical

Corporate Governance and strategic management- Strategic Leadership- Corporate culture and Strategic management- Corporate Politics and Power- Personal values and Business Ethics

UNIT 7: STRATEGIC EVALUATION AND CONTROL **6 Hrs.**

Level of Knowledge: Analytical

Importance, barriers- evaluation criteria- strategic control- operational control- evaluation techniques for operational control- characteristics of an effective control system

UNIT 8: STRATEGY AND TECHNOLOGY MANAGEMENT **7 Hrs.**

Level of Knowledge: Conceptual

Designing a technology strategy- Technology forecasting and R & D Strategies- Strategies for acquisition and absorption of technology- Social audit

ESSENTIAL READING

1. Rao, V.S.P., & Krishna, V.H., (2013). *Strategic Management: Text and Cases*. New Delhi: Excel Books.

RECOMMENDED READING

1. Amason, A.C. (2011). *Strategic Management :From theory to Practice(1st ed.)*. New York: Routledge.
2. Barney, J.B. &Hesterly, W.S.(2011). *Strategic Management & Competitive Advantage: Concepts & Cases(4th ed.)*. Prentice Hall.
3. Dess, G., Eisner, A., Lumpkin, G.T., &Namara, G.M. (2011). *Strategic Management: creating competitive advantages (6thed.)*. McGraw Hill Education.
4. Hill, C.W.L., & Jones, G.R. (2012). *Strategic Management-An Integrated Approach (10thed.)*. South Western: Cengage Learning.

BBA541E - DATA MANAGEMENT FOR BUSINESS ANALYTICS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: The goal of the course is to present a basic introduction to database management systems, with an emphasis on database design methodologies (ER diagrams and normalization theory), database query languages (relational algebra and SQL) and Big Data. Students will design and implement a simple database system to deepen their understanding of the basic database concepts and theories. After taking this course, the students will have the capability of developing various database applications such as enterprise information systems, e-commerce systems, business management systems and business analytics.

COURSE OBJECTIVE:

1. Understand terms related to database design and management
2. Understand the objectives of data and information management
3. Understand the database development process
4. Understand the relational model and relational database management system
5. Assess data and information requirements *f* Construct conceptual data models
6. Develop logical data models

UNIT 1: DBMS & RDBMS**10 Hrs.**

Definition of data, uses & need of data in organizations, Need for Information, Qualities of Information, Definition of DBMS, Entities & their attributes, advantages & disadvantages of DBMS, DBMS Architecture, Functions of DBMS , Data Models: The hierarchical model, the network model, the relational model and OORDBMS

UNIT 2: DATABASE DESIGN (PRACTICAL)**20 Hrs.**

Understanding the need for Data base, mapping user's output needs with database design, Feasibility Study Understanding fields, record, file and database, designing front end and back end user interface, integration of backend database with online and traditional interfaces using MSACCESS Definition and need of Normalization, First Normal Form, Second Normal Form, Third Normal Form. Relations, domains & keys.

UNIT 3: RELATIONAL MODEL & SQL**10 Hrs.**

Understanding the history of RDBMS, its role and importance of creating robust database, RDBMS Terminology, CODD's rule for RDBMS, Concept of Relational Model, and SQL: SQL Database creation & manipulation views & queries on RDBMS.

UNIT 4: DATABASE RECOVERY & BACKUP, PERFORMANCE & SECURITY**10 Hrs.**

Introduction to database Recovery, Concurrency Control Techniques, Locking mechanism, Dead Locks, Techniques of backup, RAID configuration, database Security techniques and storage technique- DAS, NAS, SAS.

UNIT 5: BIG DATA**10 Hrs.**

Introduction to Big Data, Characterize the phenomena of Big Data and Big Data Analytics, Analyze and apply different visual analytics concepts and tools for a big data sets, Analyze and apply different concepts, methods, and tools for analyzing big data in organizational contexts, critically assess the ethical and legal issues in Big Data Analytics

TEXT & REFERENCES

1. Elmasari, Navathe, *"Fundamentals of Database Systems"*, Addison Wesley.
2. Korth, Silbertz, Sudarshan, *"Database Concepts"*. McGraw Hill.
3. Majumdar & Bhattacharya, *"Database Management System"*, Tata McGraw Hill.

BBA534 - CORPORATE LAW**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: The syllabus is structured to provide basic conceptual knowledge about the recent developments in legal framework of Companies as per Companies Act, 2013. This course intends to familiarize the students with the compliance requirements for Companies in India. Course Objectives: The objectives of this course to educate the students by imparting the knowledge of rules and regulations relating to the management of Company in India in an ever-changing environment to contribute effectively to the industry in particular and to the society in general.

COURSE LEARNING OUTCOME: By the time they complete the course they would have basic knowledge about laws that are applicable for Companies in India. They will get a fair idea as to the Legal Compliance Requirements for Companies.

UNIT 1: INTRODUCTION TO COMPANY LAW**10 Hrs.**

Level of Knowledge: Conceptual

Development of Company Law in India- Objects of the Act. Meaning and definition of Company, Definition of Subsidiary and Joint Venture Company. Special features, - Kinds of Companies – Features of various types of companies – Differences between Private and Public companies, Producer Company Punishment for improper use of “Limited” or “Private Limited”, Associate company- Small Company.

UNIT 2: FORMATION OF A COMPANY**6 Hrs.**

Level of Knowledge: Analytical

Promotion – Role of Promoters –Position of Promoters-Incorporation of a Company – Memorandum of Association – Its contents and alteration – Doctrine of Ultra vires (Ultra Vires Company & Ultra Vires Directors) – Articles of Association – Its contents – Distinction between Memorandum of Association and

Articles of Association – Doctrine of Constructive Notice – Doctrine of Indoor Management & It's Exceptions– Certificate of Incorporation and Commencement of Business.

UNIT 3: SHARE CAPITAL & BORROWINGS

4 Hrs.

Level of Knowledge: Analytical

Prospectus – Its contents – Statement in lieu of Prospectus-Golden Rule of Framing of Prospectus-Misstatements in Prospectus & Remedies for Misstatement – Allotment of Shares – Irregular Allotment-Effects of Irregular Allotment. Loan and investment by company, Investments of company to be held in its own name.

UNIT 4: MEMBERSHIP OF A COMPANY

8 Hrs.

Level of Knowledge: Conceptual

Member & Shareholder: Meaning & Distinction. Eligibility for Membership. Modes of Acquiring Membership – Cessation/Termination of Membership – Rights and Liabilities of Members – Register of Members.

UNIT 5: COMPANY MANAGEMENT

14 Hrs.

Level of Knowledge: Analytical

Definition, Appointment of key managerial personnel, position of directors, Powers & duties of directors, Maximum No. of Directors to be fifteen. Audit Committees, Nomination and Remuneration Committee and Stakeholders Relationship Committee, Appointment of CSR Committee. Related Party Transactions. Liability of directors, types of directors, Contract by One Person Company, removal, disqualification, control, interested director, (Meaning & Definition) Rights and duties of managerial personnel their remuneration, Overall maximum managerial remuneration and managerial remuneration in case of absence or inadequacy of profits, Disclosure of Interest by Directors, Register of contracts or arrangements in which directors are interested, Compensation for loss of office of, Director, managing or whole-time director or manager. Audit Committees, Nomination and Remuneration Committee and Stakeholders Relationship Committee,

Prevention of oppression and mismanagement – Role of Auditor (Reporting on Fraud), Appointment & Rotation, Additional Responsibility of Independent Director, Fraud Risk Mitigation, Penalties for Fraud- Powers of Court and Central Government

UNIT 6: COMPANY MEETINGS & COMPANY SECRETARY

12 Hrs.

Level of Knowledge: Analytical

Meetings of Board of Directors– Meetings of shareholders – Statutory meeting – Annual General Meeting – Extraordinary General Meeting – Resolutions - Quorum – Principle of Majority rule – Protection of minority interest – Investigation –Company Secretary- Qualifications – Appointment – Duties.^[1] Secretarial Audit for Bigger companies.

UNIT 7: CORPORATE RESTRUCTURING & WINDING UP

15 Hrs.

Level of Knowledge: Analytical

Compromise, Arrangement, Merger and amalgamation of companies. Merger or amalgamation of company with foreign company, Cross Border Merger & Fast Track Merger, Power to acquire shares of shareholders dissenting from scheme or contract approved by majority, Purchase of Minority shareholding, Power of Central Government to provide for amalgamation, Class action, of companies in public interest, Liability of officers in respect of offences committed prior to merger, amalgamation, etc. Types of winding up – winding up by the Court – Voluntary winding up (members' voluntary winding up and creditors' voluntary winding up)- Company Liquidator (Meaning & Definition)– Winding up subject to the supervision of the Court – Liquidator – Appointment, his duties, powers and liabilities, Preferential payments, overriding preferential payments, Settlement of list of contributories and application of assets, Removal and Replacement of Liquidator, Effect of winding up order. Stay of suits, etc., on winding up order Consequences of winding up. Exercise and control of Company Liquidator's powers, Audit of Company Liquidator & accounts, Final meeting and dissolution of company.

UNIT 8: LIMITED LIABILITY PARTNERSHIP**6 Hrs.**

Level of Knowledge: Analytical

Introduction to LLP; Basis of LLP, Nature of LLP; Distinguishing features of LLP; Main benefits of LLP; Who may form an LLP; Who can be partner in LLP; Who cannot be a partner in LLP; How many partners are required for an LLP; Name of LLP; Registered Office; Business activities of LLP; Governance and Administration of LLP; Position of Designated Partners; Whistle blowing; Responsibilities of Designated partners; Liability of LLP; Liability of designated partners; Designated Partners, Registration Procedure; Conversion of Partnership Firms in to LLP, Winding up and dissolution

RECOMMENDED BOOK

1. *Avatar, S. (2014). Company Law, Eastern Book Company, Lucknow.*

BOOKS FOR REFERENCE

1. *Bhargava & Bhargava 2013-Circulars & Clarifications on Company Law, Taxman Publications, New Delhi.*
2. *Chandratre.K.R (2013). Compendium on Capital Issues & Listing, Taxman Publications, New Delhi.*
3. *Datey. (2013) Students Guide to Corporate Laws. Taxman Publications, New Delhi.*
4. *Gulshan.S.S (2013). Company Law, EXCEL BOOKS, New Delhi.*
5. *Ramaiah-(2014). Company Law: Text & cases. Law House Publication, Allahabad.*

BBA531 - MACHINE LEARNING – I**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4****UNIT 1: NATURE AND SCOPE OF ECONOMETRICS****UNIT 2: STATISTICAL INFERENCE**

Normal distribution; chi-sq, t- and F-distributions, Estimation of parameters, Testing of hypotheses, Defining statistical hypotheses, Distributions of test statistics, Testing hypotheses related to population parameters, Type-I and Type-II errors; Power of a test, Tests for comparing parameters from two samples

UNIT 3: SIMPLE LINEAR REGRESSION MODEL: TWO VARIABLE CASE

Estimation of model by method of ordinary least squares, Properties of estimators, Goodness of fit, Testing of Hypotheses, Scaling and units of measurement, Confidence intervals, Gauss Markov Theorem, Forecasting

UNIT 4: MULTIPLE LINEAR REGRESSION MODEL

Estimation of parameters, Properties of OLS estimators, Goodness of fit- R^2 and Adjusted R^2 , Partial regression coefficients, Testing Hypotheses: Individual and Joint, Functional Forms of Regression Models, Qualitative (dummy) independent variables

UNIT 5: VIOLATIONS OF CLASSICAL ASSUMPTIONS: CONSEQUENCES, DETECTION AND REMEDIES

Multicollinearity, Heteroscedasticity, Serial Correlation, Omission of a relevant variable, Inclusion of irrelevant variable, Tests of specification

BBA542E - DATA VISUALIZATION USING TABLEAU

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: Tableau is data visualization software that is used for data science and business intelligence. Tableau can create a wide range of different visualization to interactively present the data and showcase insights. It comes with tools that allow drilling down data and seeing the impact in a visual format that can be easily understood by any individual. Tableau also comes with real-time data analytics capabilities and cloud support. Students will be able to do Smart, strategic and real time decision making for the development of any organization.

COURSE OBJECTIVES:

1. Understand a business problem through the data
2. Understand TABLEAU interface components to create most effective presentation through powerful visualization
3. Build and interactive dashboards
4. Sharing workbook through publish options

UNIT 1: INTRODUCTION TO TABLEAU

7 Hrs.

BI Evolution - Legacy vs Tableau - Qlikviewvs Tableau - Tableau Products- Tableau Desktop Workspace – Tableau get started, Navigation, Design flow, Tableau file and data types and terminology. First Worksheet- Split, Pivot, Alias, Live vs Extract, Filter, Custom sql - Measure Names - Number of Records -Calculated field introduction - Header for single measure

UNIT 2: DATA VISUALIZATION USING CHARTS

10 Hrs.

Understanding continuous vs discrete- YOY, Packed bubble chart and word cloud. Dual Axis -Map, Line and Bar Chart, Quick Filters, Page Shelf.Calculated Field and Parameters, Dynamic measures, IF and Case

statements, Histogram and Bins.Scatter Plot, Box-plot whisker Chart, Bullet Chart.High light table, Text Table, Heat map Table Calculations, Sub/Grand Total, Aggregate vs Non-AggregateTool Tip.

UNIT 3: EXTRACTS IN DETAIL AND BUILDING DASHBOARDS

10 Hrs.

Connecting to various sources, Connecting to web data, ConnectorsWork Sheet Actions, Building Dashboards, Dashboard Actions, Layouts, Formatting , Story points and use cases , Level of Detail Calculations, Row level access and column level access, Control charts, Using INDEX to sort multiple columns , SQL Overview, Joins, UNION vs UNION ALL, WITH Statements.

UNIT 4: TIME SERIES ANALYSIS AND FORECASTING

10 Hrs.

Visualize time series data using TABLEAU function - Perform calculations with time series data in Tableau

UNIT 5: SHARING WORKBOOKS

13 Hrs.

Publishing to office and PDF; Publishing dashboard to server, Publishing data source to server, Connecting to Data in server, Publishing extract to server, Scheduling extract, Permissions, Groups, Access levels

ESSENTIAL READING

1. *Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations*, Ben Jones
2. <https://tanthiamhuat.files.wordpress.com/2015/07/communicating-data-with-tableau.pdf>

RECOMMENDED READING

1. *Tableau you're Data!*
2. <https://tanthiamhuat.files.wordpress.com/2015/07/tableau-your-data.pdf>

SIXTH SEMESTER

BBA631 - INSURANCE AND RISK MANAGEMENT

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course provides students with the tools to better understand & analyse products and processes with an insurance component. The course also covers the use of insurance products as part of a broader enterprise wide risk management strategy and provides an overview of key and unique risk management issues raised as a financial institution conduct issue and annuity product sales or underwriting activities. This course intends to provide a basic understanding of the insurance mechanism and understanding of risk and methods of handling risk, risk identification and measurement.

COURSE OBJECTIVES:

1. To make students understand the importance and the basic concepts of insurance.
2. To familiarize the students with basics of life insurance contract, issuance and settlement of a insurance contract
3. To know various aspects of General Insurance contract, issuance and settlement of a general insurance contract.
4. To know the claims management and claims settlement in General Insurance and Life Insurance.
5. To understand the risk management. risk identification and risk measurement process in Insurance companies.

LEARNING OUTCOME:

At the end of this course the student would be familiar with different aspects of Life and General Insurance business in India including understanding of Risk Management processes and strategies adopted by Indian Insurance companies.

UNIT 1: INTRODUCTION**15 Hrs.**

Level of Knowledge: Conceptual

Historical perspective, Meaning, Nature and Scope of Insurance, Classification of Insurance Business- Life Insurance and General Insurance- Fundamental principles of insurance- Essentials of Insurance Contracts. Indian Insurance Industry- Insurance sector Reforms in India-Liberalization of Insurance Markets-Major players of Insurance. Regulation of Insurance-IRDA

UNIT 2: LIFE INSURANCE**15 Hrs.**

Level of Knowledge: Conceptual

Regulations relating to Life Insurance-General principles of life insurance contract proposals and policy; assignment and nomination; title and claims; concept of trusts in life policy; Growth of Actuarial Science- Features of Life Insurance-Life Insurance Contract-Life Insurance Documents-Insurance Premium Calculations. Classification -Classification on the Basis –Duration-Premium Payment- Participation in Profit-Number of Persons Assured-Payment of Policy Amount-Money Back Policies-Unit Linked Plans. Annuities -Need of Annuity Contracts -Classification of Annuities

UNIT 3: GENERAL INSURANCE**15 Hrs.**

Level of Knowledge: Conceptual

General Insurance-Laws Related to General Insurance-General Insurance Contract- Health Insurance –Medi-claim Policy, Group Medi-claim Policy, Personal Accident Policy – Child Welfare Policy-Employee Group Insurance – Features of Group Health Insurance – Group Availability Plan. Fire Insurance -Essentials of Fire Insurance Contracts, Types of Fire Insurance Policies, and Fire Insurance Coverage - Marine Insurance-Types of Marine Insurance – Marine Insurance Principles Important Clauses in Marine Insurance– Marine Insurance Policies –Marine Risks-Clauses in Marine Policy.Motor Vehicles Insurance-Need for Motor Insurance, Types of Motor Insurance, and Factors to be considered for Premium Fixing -Miscellaneous Insurance-Rural Insurance Rural policies--Obligations of Insurers to the social sector.

UNIT 4: RISK MANAGEMENT**15 Hrs.**

Level of Knowledge: Conceptual and Application

Introduction to Risk Management: Risk-Risk and Uncertainty -Types of Risk-Burden of Risk-Sources of Risk-Methods of handling Risk-Degree of Risk-Management of Risk Risk Management -Risk Management Process-Identification Loss exposures-Analyzing Loss exposures-Objectives of Risk Management-Select the Appropriate Risk Management Technique-Implement and Monitor the Risk Management Program-Risk Management by Individuals and Corporations-Risk Management objectives-Need for a Rationale for Risk Management in Organizations- Understanding the cost of Risk-Individual Risk Management and the Cost of Risk-Risk Management and Societal Welfare.

UNIT 5: RISK IDENTIFICATION AND MEASUREMENT**15 Hrs.**

Level of Knowledge: Application

Risk Identification-Business Risk Exposures-Individual Exposures-Exposures of Physical Assets -Exposures of Financial Assets -Exposures of Human Assets -Exposures to Legal Liability - Exposure to Work-Related Injury-Basic concepts form probability and Statistics. Risk Measurement -Evaluating the Frequency and Severity of Losses -Risk Control -Risk Financing Techniques -Risk Management Decision Methods -Pooling Arrangements and Diversification of Risk. Advanced Issues in Risk Management: The Changing Scope of Risk Management- Insurance Market Dynamics-Loss Forecasting-Financial Analysis in Risk Management -- Decision Making-Other Risk Management Tools.

ESSENTIAL READING

1. *Gupta P.K., (2012). Insurance and Risk Management. Bengaluru, Himalayan Publication.*

RECOMMENDED READINGS

1. *Dr Neelam C Gulati (2011).Principles of Risk Management and Insurance. New Delhi Excel Publishing*
2. *Dr G Syamala Rao (2011).Growth and Performance of Insurance Sector with Special Reference to LIC of India. New Delhi Excel Publishing*
3. *Panda G.S., (2012). Principle and practice of insurance. Bengaluru, Kalyani publishers.*
4. *Scott E. Harrington, Gregory R Niehaus. (2007). Risk Management and Insurance. Tata McGraw Hill Publishing Company Limited, New Delhi.*
5. *C. Arthur Williams, Jr. Peter Young, Michael Smith. (2007). Risk Management and Insurance. Tata McGraw Hill Publishing Company Limited, New Delhi.*

BBA632 - OPERATIONS MANAGEMENT

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: Operations Management (OM) is concerned with the management of resources and activities that produce and deliver goods and services for customers. Efficient and effective operations can provide an organization with major competitive advantages since the ability to respond to customer and market requirements quickly, at a low cost, and with high quality, is vital to attaining profitability and growth through increased market share.

The course focuses on the basic concepts, issues, and techniques for efficient and effective operations.

COURSE OBJECTIVES: Upon completing this course, students should be able to

1. Understand the strategic role of operations management in creating and enhancing a firm's competitive advantages
2. Understand key concepts and issues of OM in both manufacturing and service organizations
3. Understand the interdependence of the operations function with the other key functional areas of a firm
4. Apply analytical skills and problem-solving tools to the analysis of the operations problems.
5. Understand the overall view of the decision-making process as it relates to the major areas of Production & Operations Management

LEARNING OUTCOMES: Students will be well versed with the Basic Principles and processes of operations Management.

1. Students will be able to use and apply knowledge to new situations.
2. Students must be able to use information and knowledge to solve a problem, answer a question or perform another task.

UNIT 1: OPERATION MANAGEMENT CONCEPTS**12 Hrs.**

Level of Knowledge: Basic

Introduction, Historical Development, Concept of Production, Production System, Classification of Production System, Production Management, Objectives of Production Management, Operating System, Concept of Operations, Distinction between Manufacturing Operations and Service Operations, Operations Management, A Framework for Managing Operations, Objectives of Operations Management, Managing Global Operations, Scope of Production and Operations Management.

UNIT 2: OPERATIONS DECISION MAKING, SYSTEMS DESIGN AND CAPACITY 8 Hrs.

Level of Knowledge: Basic / Conceptual

Introduction, characteristics of decisions, Framework for Decision making, Decision methodology, Decision support system, Economic model (Break even analysis), Design and Systems capacity, Capacity planning, Process of Capacity planning, Importance of capacity decisions.

UNIT 3: FACILITY LOCATION AND LAYOUT**8 Hrs.**

Level of Knowledge: Conceptual / Analytical

Introduction and meaning Need for selecting a suitable location, Factors influencing plant location/Facility location, General locational factors, and Specific locational factors for manufacturing organization. Specific locational factors for Service organization.

UNIT 4: MATERIALS MANAGEMENT**10 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Introduction and Meaning, Scope or functions of Materials Management, Material planning and control, Purchasing, Stores Management, Inventory control, Standardization, Simplification, Value analysis. Just in time, Ergonomics.

UNIT 5: QUALITY CONTROL**10 Hrs.**

Level of Knowledge: Basic

Introduction, Quality, Fundamental Factors Affecting Quality, Control, Need for Controlling Quality Inspection, Types of Quality Control, Steps in Quality Control, Objectives of Quality Control, Benefits of Quality Control, Seven Tools for Quality Control, Causes of Variation in Quality, Statistical Process Control, Quality Circles, Total Quality Management, ISO 9000: ISO 14000 Series.

UNIT 6: MAINTENANCE MANAGEMENT**8 Hrs.**

Level of Knowledge: Basic

Introduction, objective, types, maintenance planning and scheduling, Modern Scientific Maintenance Methods- Six Sigma Maintenance, Enterprise Asset Management (EAM), Lean Maintenance, Computer Aided Maintenance, Total Productive Maintenance (TPM).

UNIT 7: MATERIALS AND CAPACITY REQUIREMENT PLANNING AND WASTE MANAGEMENT**10 Hrs.**

Level of Knowledge: Basic / Conceptual / Analytical

Need for Production Planning and Control, Objectives of Production Planning and Control, Phases of Production Planning and Control, Functions of Production Planning and Control, Operations Planning and Scheduling Systems, Aggregate Planning, Master Production Schedule (MPS), Material Requirement Planning (MRP), Capacity Planning, Routing, Scheduling.

Introduction and Meaning, Reasons for Generation and Accumulation of Obsolete, Surplus and Scrap Items, Identification and Control of Waste, Disposal of Scrap.

UNIT 8: AUTOMATION**9 Hrs.**

Level of Knowledge: Basic

Introduction, Types of Automation, Computer Integrated Manufacturing, Reasons for Automation, Advantages of Automation, and Disadvantages of Automation, Automation Strategies, Automated Flow Lines, Automated Guided Vehicles Systems, and Automated Storage/Retrieval Systems.

ESSENTIAL READING

1. Kumar, S. A. & Suresh, N. (2013). *Production and Operations Management*, New age International publishers.

RECOMMENDED READING

1. Singh, S.P. (2014) *Production and Operations Management*, 1/e, New Delhi: Vikas Publishing House
2. Krajewski, Lee J., Ritzman, Larry P., and Manoj K. Malhotra (2013). *Operations Management: Processes and Value Chains*, 8/e; New Delhi: Pearson Education.
3. Aswathappa, K. & Reddy, G.S., Reddy, M.K. (2012). *Production and Operations Management*, Himalaya Publishers.
4. Khann, R.B. (2007). *Production and Operations Management*. New Delhi: PHI Learning Pvt.
5. Richard, B. Chase, Ravi Shankar, F. Robert, Jacobs and Nicholas, J. Aquilano (2010). *Operations and Supply Management* 12/e; New Delhi: Tata McGraw-Hill

BBA633 - BUSINESS LAW

Total Teaching Hours for Semester: 60 Hrs

Max Marks: 100

Credits: 4

COURSE DESCRIPTION: This course covers important components of Business Laws such as, Contract Law, Intellectual Property Law, Consumer Protection Law, Competition Law and Law of Sale of Goods.

COURSE OBJECTIVE:

1. To provide an exposure and understanding of important business laws in India to manage the businesses efficiently and to contribute effectively to the industry in particular and to the society in general. It also seeks
2. To familiarize the students with the legal scenario of doing business in India.

COURSE LEARNING OUTCOME:

By the time they complete the course they will be confident of the legal requirements of doing business in India. They will gain an insight in to the important s laws which matter in business world.

UNIT 1: INTRODUCTION

4 Hrs.

Level of Knowledge: Basic

Meaning and Scope of Business Law – Sources of Indian Business Law.

UNIT 2: LAW OF CONTRACTS

15 Hrs.

Level of Knowledge: Conceptual

[Indian Contracts Act of 1872]: Definition – types of contracts- Government Contracts: Art. 299 Requirements under Constitution, Scope and Extent of Art.299, 'Equity, Fairness and reasonableness, Doctrine of Promissory Estoppel V/s. Executive Necessity, No person liability. E-Contracts: Meaning & need for Digital Goods, Unfair terms in E-contract, Information technology Act and E-Contract. Indian Evidence Act– essentials –

offer, acceptance, consideration, capacity of parties, free consent, legality of object and consideration, various modes of discharge of a contract, remedies for breach of contract.

UNIT 3: INTELLECTUAL PROPERTY LAWS

14 Hrs.

Level of Knowledge: Analytical

Meaning and scope of intellectual properties – Patent Act of 1970 and its amendments as per WTO agreement, back ground, objects, definition, inventions, patentee, true and first inventor, procedure for grant of process and product patents, WTO rules as to patents, rights to patentee – infringement – remedies. The Copy Rights Act, Meaning – Its uses and rights. The Trade Marks Act, its meaning, registration, procedures – infringement – Authorities concerned – Remedies.

UNIT 4: COMPETITION LAW

15 Hrs.

Level of Knowledge: Conceptual

Concept of Competition, Development of Competition Law, overview of MRTP Act 2002, Anticompetitive Agreements, Abuse of dominant position, combination, regulation of combinations, Competition Commission of India; Appearance before Commission, Compliance of Competition Law. Competition Law 2003: Meaning and scope, salient features, offences and penalties under the Act.

UNIT 5: THE SALE OF GOODS ACT 1930

10 Hrs.

Level of Knowledge: Analytical

Definition of goods, Sale and Agreement to Sell, Conditions and Warranties, Rights & Liabilities of a Buyer & Seller, Rights of an Unpaid Seller.

UNIT 6: LAW OF CONSUMER PROTECTION**10 Hrs.**

Level of Knowledge: Analytical

Consumer Protection Act 1986: Back ground – definitions – consumer, consumer dispute, Complaint Procedure, defect, deficiency, and service, Remedies, Consumer Protection Council, Consumer Redress Agencies, District Forum, State Commission and National Commission.

UNIT 7: CYBER LAWS**7 Hrs.**

Level of Knowledge: Conceptual

Information Technology Act, 2000: Objectives, definitions and salient features, provisions pertaining to piracy and related offences and personalities.

RECOMMENDED TEXTBOOK

1. *Gulshan, S.S. (2014). Business & Corporate Law, Excel Books, New Delhi.*

REFERENCE BOOKS

1. *Anson, W. R. (2009). Law of contract (29th edition), Oxford University Press, Oxford, New Delhi.*
2. *Avtar, S. (2011). Principles of Mercantile Law (9th Edition), Eastern Book Company, New Delhi.*
3. *Kapoor, N.D (2012.). Elements of Mercantile Law, Sultan Chand & Sons, New Delhi.*
4. *Padmanabhan, A. (2012. Intellectual property rights: Infringement and remedies, LexisNexis Butterworth's, Nagpur.*
5. *Tulsian, P.C. (2013). Business Laws, 5th Edition),Tata-McGraw Hill Education Limited, New Delhi*

BBA642E - DATA WAREHOUSING AND DATA MINING IN BUSINESS**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: Data warehousing & Data Mining has recently gained a considerable momentum as a paradigm for driving firm's daily business analytics operations. This course provides an introduction to fundamental techniques and novel applications of data warehouse and Data Mining. Issues covered by this learning experience include data warehouse planning; data mining techniques, business analytics modeling, design, and implementation. In particular, the role of data warehouse in supporting business intelligence and effective decision making is emphasized through labs, projects and case studies.

Data is a critical type of business capital, and data mining is essential to unleash the value of data for business analytics. Mining data from massive amounts of data accumulated in organizations creates value for individuals, businesses, and society via data-driven decision-making or pattern based strategy. In this course, students will learn state-of-the-art data mining methods and theories. We will also discuss the applications of data mining methods to solve real-world business problems in a wide range of areas such as marketing, finance, and healthcare. As one of Business Analytics elective depth electives, it provides a good balance between theory and practice. The participants will explore applications and have great opportunity for hands-on experimentation with data warehousing and data mining using advanced software packages from leading industrial vendors.

This course will use Rapid Miner / WEKA, which are popular, open source, graphical data mining & intelligence tools, as well as MySQL open source database. This course should prove valuable to you if you want to join or start an analytics-centric firm, help an existing organization improve its data mining skill set, and make good managerial decisions regarding data mining and business intelligence.

COURSE OBJECTIVE:

1. Be familiar with mathematical foundations of data mining tools.
2. Understand and implement classical models and algorithms in data warehouses and data mining
3. Characterize the kinds of patterns that can be discovered by association rule mining, classification and clustering.

4. Master data mining techniques in various applications like social, scientific and business application context.
5. Develop skill in selecting the appropriate data mining algorithm for solving practical problems.

UNIT 1: DATA WAREHOUSE**10 Hrs.**

Introduction to Data Ware House, Differences between operational data base systems and data Ware House, Data Ware House characteristics, Data Ware House Architecture and its components, Extraction-Transformation-Loading, Logical (Multidimensional), Data Modeling, Schema Design, star and snow-Flake Schema, Dimension Table characteristics; Fact-Less-Facts, Dimension Table characteristics; OLAP cube, OLAP Operations, OLAP Server Architecture-ROLAP, MOLAP and HOLAP.

UNIT 2: INTRODUCTION TO DATA MINING**10 Hrs.**

Introduction, What is Data Mining, Definition, KDD, Challenges, Data Mining Tasks, Data Preprocessing-Data Cleaning, Missing Data, Dimensionality Reduction, Feature Subset Selection, Discretization and Binaryzation , Data Transformation; Measures of similarity and dissimilarity-Basics.

UNIT 3: ASSOCIATION RULES**15 Hrs.**

Problem Definition, Frequent Item Set Generation, The APRIORI Principle, Support and Confidence Measures, Association Rule Generation, APRIORI Algorithm, The Partition Algorithms, FP-Growth Algorithms, Compact Representation of Frequent Item Set-Maximal Frequent Item Set, Closed Frequent Item Set.

UNIT 4: CLASSIFICATION**15 Hrs.**

Problem definition, General Approaches to solving a classification problem, Evaluation of Classifiers, Classification techniques, Decision trees-Decision Tree Construction, Methods for expressing attribute test conditions, Measures for Selecting the Best split, Algorithm for Decision tree Induction, Naïve-Bayes Classifier, Bayesian Belief Networks; K-nearest neighbor classification-Algorithm and characteristics.

UNIT 5: CLUSTERING**10 Hrs.**

Problem Definition, Clustering overview, Evaluation of clustering algorithms, Partitioning clustering K-Means Algorithm, K-Means Additional Issues, PAM Algorithm, Hierarchical Clustering-Algorithm-Agglomerative Methods and Divisive Methods, Basic Agglomerative Hierarchical Clustering Algorithm, Specific techniques, Key Issues in Hierarchical Clustering, Strengths and weakness, Outlier Detection

TEXT BOOK

1. *Data Mining-Concepts and Techniques- Jiawei Han, Micheline Kamber, Morgan Kaufmann Publishers, Elsevier, 2 Edition, 2006.*
2. *Introduction to Data Mining, Pang-Ning Tan, Vipin Kumar, Michael Steinbanch, Pearson Education.*

REFERENCES

1. *Data Mining Techniques, Arun K Pujari, 3rd Edition, Universities Press.*
2. *Data Ware Housing Fundamentals, Pualraj Ponnaiah, Wiley Student Edition.*
3. *The Data Ware House Life Cycle Toolkit- Ralph Kimball, Wiley Student Edition.*
4. *Data Mining, Vikaram Pudi, P Radha Krishna, Oxford University.*

BBA643E - ARTIFICIAL INTELLIGENCE FOR BUSINESS AND SOCIETY**Total Teaching Hours for Semester: 60 Hrs****Max Marks: 100****Credits: 4**

COURSE DESCRIPTION: Driven by the combination of increased access to data, computational power, and improved sensors and algorithms, artificial intelligence (AI) technologies are entering the mainstream of technological innovation. These technologies include search, machine learning, natural language processing, robotics and image processing. The course is an introduction to AI from an applied perspective in Business and Society. It begins by describing what the latest generation of artificial intelligence techniques can actually do. After an introduction of some basic concepts and techniques, the course illustrates both the potential and current limitations of these techniques with examples from a variety of business applications. In a final project, groups of students will participate in the creation of an AI-based application.

COURSE OBJECTIVE:

1. Identify problems where artificial intelligence techniques are applicable
2. Apply selected basic AI techniques; judge applicability of more advanced techniques.
3. Participate in the design of systems that act intelligently and learn from experience.
4. Raise students' awareness of the importance of AI and its application in business and society.

UNIT 1: INTRODUCTION TO ARTIFICIAL INTELLIGENCE**10 Hrs.**

Introduction to Artificial Intelligence, AI History & Philosophy, Logic Based AI, Knowledge Based AI, Contemporary AI

UNIT 2: PHILOSOPHY OF ARTIFICIAL INTELLIGENCE**10 Hrs.**

Philosophy of Mind, Evolving Intelligence, Types of Memory, Human Like Problem Solving, Difference between Artificial Intelligence, Biological Intelligence, Natural Intelligence, Hard Computing and Soft Computing, Problem Solving, Knowledge and Reasoning, Intelligent Agent and Human Computer Interface

UNIT 3: APPLICATION OF ARTIFICIAL INTELLIGENCE**10 Hrs.**

Uses of AI in Business applications and Social Applications, AI in Governance, Commercial Artificial Intelligence Applications in Business (Financial Analysis, Sentimental Analysis & Behavioral Analysis), Computer Vision, Virtual Reality, Cognitive Intelligence, Smart City Project Implementation using Artificial Intelligence

UNIT 4: ADVANCED ARTIFICIAL INTELLIGENCE**10 Hrs.**

Evolutionary Programming, Artificial Neural Network, Fuzzy Logic, Genetic Algorithm, Genetic Programming, Machine Learning (A paradigm of learning, Classification of learning strategies (Rote Learning, Learning by analogy, Learning by instruction, learning by induction, Learning by deduction)), Common Sense Computing, Computer Vision, Virtual Reality, Cognitive Intelligence

UNIT 5: CASE STUDY / USE CASE**20 Hrs.**

Case Study in Conversational systems, Advanced Robotics, Drones, Automated Vehicles, Healthcare application, Gamification and Entertainment, Business Ethics and Artificial Intelligence

TEXT BOOK

1. *Artificial Intelligence: A Modern Approach (2nd edition)* by Stuart J. Russell, Peter Norvig, Prentice Hall, (2010)
2. *Artificial Intelligence and Machine Learning for Business: A No-Nonsense Guide to Data Driven Technologies*, Steven Finlay, Relativistic, (2017).

REFERENCE BOOK

1. *Data Mining: Introductory and Advanced Topics* by Margaret H. Dunham, Prentice Hall, ISBN: 0130888923