

SCHEME AND SYLLABUS
FOR
BACHELOR OF BUSINESS ADMINISTRATION (BBA) DIGITAL
MARKETING
(Honours/Honours with Research)

For University Teaching Department & Affiliated Institutes

(with effect from session 2023-2024)

As per National Education Policy 2020



DEPARTMENT OF MANAGEMENT STUDIES
J.C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA,
FARIDABAD

VISION OF THE DEPARTMENT

To build aspiring managers and entrepreneurs possessing good analytical skills and leadership qualities for effective decision making to contribute to the society and the nation

MISSION OF THE DEPARTMENT

1. To provide learning environment to young aspirants by introducing suitable pedagogy and innovative industry-based curriculum
2. To provide best research facilities for developing analytical capabilities
3. To impart effective managerial skills for transformation of raw minds into effective managers and entrepreneurs

OVERVIEW OF DEPARTMENT OF MANAGEMENT STUDIES

The Department of Management Studies is one of the faculties of J.C. Bose University of Science and Technology, YMCA formerly known as YMCA University of Science and Technology. The University is presently NAAC accredited 'A' Grade State Government University and most of the University Teaching Departments (UTDs) are accredited by the National Board of Accreditation.

The Department of Management Studies came into existence in the year 2008 with an MBA program offering Specialisations in Information Technology, Operations, and Power Management. The program was meant for technical graduates only. Since 2011, the MBA program has been open for all graduates. With an aim to promote academic growth that various levels, now department offers the following high-quality management programs:

- MBA (with dual Specialization)
- MBA - Executive
- BBA
- Ph.D.

The department follows an international standard curriculum which is developed in consultation with eminent academicians and industry practitioners. The program delivery is done by well-qualified, competent, research-oriented, experienced faculty members and experts from the industry.

**SCHEME OF STUDIES & EXAMINATIONS
BBA DIGITAL MARKETING**

1. PEO's (Program Education Objectives) The BBA Digital Marketing Program will:

PEO1	Produce Industry Ready Graduates having competence in various key components of Digital Marketing
PEO2	Arm students with the knowledge and skills of all core management areas to be able to understand, operate, manage and control any business organization
PEO3	Develop Leadership and Entrepreneurial skills
PEO4	Promote a Global Outlook to promote creative solutions and innovation
PEO5	Inculcate Professional and Human Values for long term sustainable growth.

2. PO's (Program Outcomes) After program completion, the students will be able to:

PO1	Demonstrate an understanding of business functional areas and their interlinkage within.
PO2	Convey ideas and information effectively
PO3	Apply digital marketing tools to manage a business's customer relationships across all digital channels
PO4	Evaluate digital marketing plans and strategies for different business models
PO5	Create and execute a digital marketing plan from scratch

3. PSO's (Program Specific Outcomes) After program completion, the students will be able to:

PSO1	Promote a Global Outlook to promote creative solutions and innovation
PSO2	Inculcate Professional and Human Values for long terms sustainable growth.
PSO3	Apply digital marketing tools to manage a business's customer relationships across all digital channels
PSO4	Evaluate digital marketing plans and strategies for different business models
PSO5	Create and execute a digital marketing plan from scratch

Abbreviations

DSC- Discipline Specific Course

MIC- Minor Course

VOC-Vocational Course

MDC- Multi-Disciplinary Course

AEC- Ability Enhancement Course

SEC- Skill Enhancement Course

VAC- Value Added Course

MOOC- Massive Open Online Course

Mooc Guidelines

1. All the Chairperson/ Principals of the UTDs/ Affiliated Institutions can offer up to two MOOC courses which are the part of curriculum as Core/Elective/VAC/AEC/other courses and are being run through the SWAYAM platform, during the whole degree term. The SWAYAM platform may be utilized to supplement the teaching-learning process in the Institution considering the academic requirements i.e., in case of non-availability of resources/ facilities for offering the courses sought for by the students.
2. The departmental/ institutional MOOC Coordinators, appointed by chairpersons of concerned departments/ Principals of affiliated institutions, will be responsible for identification of relevant MOOCs in the UTDs/ institutions and smooth conduction during the course. Such MOOCs should be well approved by the concerned BOS of the department.
3. Department/ affiliated institution should ensure that the syllabus of chosen MOOC course should be similar to an extent of at least 60% with the syllabus of existing Core/Elective/VAC/AEC/other courses of the department.
4. Students can opt for 12 to 16 weeks MOOCs equivalent to 3 or 4 credits under mentorship of faculty (MHRD MOOC's guidelines 11.1(J) issued by the MHRD vide its orders dated 11/03/2016).
5. University shall give the equivalent credit weightage to the students for the credits earned through MOOC courses and such credits will be transferred in the ABC (Academic Bank of Credits) account of the student.
6. Importance of online learning and credit transfer policy must be shared with the students at entry level by the concerned department/affiliated institution. Same may be incorporated during the induction programme for newly admitted students.

SEMESTER-WISE SCHEME OF EXAMINATION OF BBA DIGITAL MARKETING

FIRST YEAR

First Semester

Paper No	Title of Paper	Credits	Marks			Code
			Internal	Practical	External	
BBA/DIMK/101	Fundamentals of Management	4	25	-	75	DSC
BBA/DIMK/102	Principles of Marketing	4	25	-	75	DSC
BBA/DIMK/103	Managerial Economics	4	25	-	75	MIC
BBA/DIMK/104	Business Mathematics	3	25	-	75	MDC
AEC-105-N1	English – I	2	25	-	75	AEC
BBA/DIMK/106	Managerial Skills Development	3	25	75	-	SEC
VAC-106-N1	Environment and Ecology	2	25	-	75	VAC
	TOTAL	22	175	75	450	

Second Semester

Paper No	Title of Paper	Credits	Marks			Code
			Internal	Practical	External	
BBA/DIMK/201	Introduction to Digital Marketing	4	25	-	75	DSC
BBA/DIMK/202	Financial Accounting	4	25	-	75	DSC
BBA/DIMK/203	Indian Business Environment	4	25	-	75	MIC
BBA/DIMK/204	Applications of Business Statistics	3	25	-	75	MDC
AEC-106-N1	English – II	2	25	-	75	AEC
BBA/DIMK/206	Introduction to R Programming	3	25	75	-	SEC
VAC-107-N1	Natural Resources and Biodiversity Conservation	2	25	-	75	VAC
	TOTAL	22	175	75	450	

Exit Option: Any student opting for exit option after the second semester will get UG Certificate provided he/she completes 44 Credits of first two semesters and additional 4 credits of internship report based on summer internship of 4-6 weeks. Thus, he/she will be eligible to exit the course with 48 Credits. In addition, the internship report would be evaluated by external expert from panel approved by Department of Management Studies, J C Bose University of Science and Technology, YMCA, Faridabad. Furthermore, the credits of internship report would be included/ mentioned in the UG Certificate as follow:

Course code	Nomenclature of the course	Category	Internal Marks	External Marks	Practical	Total Marks	Credits
BBA/DIMK/207	Internship	Internship	-	-	100	100	4

Note: Four credits of internship earned by a student during internship after 2nd semester or 4th semester will be counted in 5th semester of a student who pursues three year UG program without taking exit option.

Note: Students who opt to exit after completion of the first year will be allowed to re-enter the degree program within three years and complete the degree program within the stipulated maximum period of seven years.

DETAILED SYLLABUS OF BBA DIGITAL MARKETING
SEMESTER-I

FUNDAMENTALS OF MANAGEMENT
PAPER CODE: BBA/DIMK/101

Total Credits: 4
Internal Marks: 25
External Marks: 75

Course Outcomes:

After completion of this course, the students will be able to:

1. Understand the concepts and principles of Management
2. Develop business plan
3. Effectively organize and manage human resources
4. Understand various control techniques

UNIT-I

Management – Definition, nature, purpose and scope of management; Difference between management and administration; Skills and roles of a manager; functions of management; Fayol's principles of management; Evolution of management thought; Scientific management, Management by objectives; Management by exception.

UNIT-II

Planning – Meaning and characteristics of planning; Types of plans; Planning process; Barriers and how to overcome barriers in planning; Premising and forecasting; Strategic management.

UNIT-III

Organizing – Organizational design and Structure; Departmentation; Span of management; Centralization and De-centralization; Delegation; Authority & responsibility; Line and staff organizations.

UNIT-IV

Staffing – Human Resource Management; Recruitment and Selection; Performance appraisal; Organizational Change; Resistance to Change; Directing- Meaning & characteristics; Controlling- Concept, planning-control relationship, process of control, Control Techniques; Team – Concept, Characteristics of team.

Suggested Readings:

1. Stoner James A.F., Principles of Management, Pearson Education
2. Rao V. S. P., Principles & Practice of Management, Konark Publishers Pvt Ltd.
3. Koontz O'Donnell, Principles of Management, McGraw-Hill Inc.
4. Chhabra T.N, Principles of Management, Dhanpat Rai Publishers
5. Prasad L.M., Principles & Practices of Management, Sultan Chand & Sons

NOTE: Only latest editions of the above books are recommended.

PRINCIPLES OF MARKETING
PAPER CODE: BBA/DIMK/102

Total Credits: 4
Internal Marks: 25
External Marks: 75

Course Outcomes:

After successful completion of the course, students will be able to:

1. Understand the process of marketing by which companies create value for customers and capture value from customers in return
2. Make the strategies related to 4Ps and understand the significance of consumer behavior
3. Know the contemporary issues of marketing
4. Face the challenges in the market and ways to tackle them in an effective manner

UNIT -I

Introduction to Marketing -Meaning, Evolution, Importance and Concepts of Marketing; Approaches to Marketing; Concept of Marketing Myopia; Holistic Marketing; Role of Information technology in Marketing; Factors affecting the Marketing Environment; Components of Marketing Mix.

UNIT -II

Segmenting, Targeting and Positioning – Need and Basis for Market Segmentation; Evaluating & Selecting Target Markets; Concept of Positioning – USP; Relationship between MIS and Marketing Research; Significance of studying Consumer Behaviour; Factors influencing Consumer Behaviour.

UNIT- III

Product Decisions – Concept, levels of Product; PLC and its Significance; New Product Development Process and Marketing Strategies at each Stage of new product development; Pricing Decisions – Meaning, Policies and Procedures, Factors affecting Pricing Decisions; Branding & Packaging Decisions.

UNIT- IV

Introduction to Market Logistics; Channels of Distribution - Concept, Types and factors affecting Channels of Distribution; Promotion Mix – Advertising, Sales Promotion, Personal Selling, Publicity & PR; Recent Developments in Marketing; Green Marketing; Ethics in Marketing.

Suggested Readings:

1. Kotler, Philip. Marketing Management, Millennium Edition. Intl ed. US: Prentice Hall.
2. Ramaswamy, V.S. & Namakumari, S., Marketing Management Indian Context with Global Perspective, McGraw Hill.
3. Kotler, P., Keller, K.L., Koshy, A., & Jha, M., Marketing Management, A South Asian Perspective, McGraw Hill.
4. Saxena Rajan, Marketing Management, Tata McGraw Hill Publishing Co. Ltd.

NOTE: Only latest editions of the above books are recommended.

MANAGERIAL ECONOMICS
PAPER CODE: BBA/DIMK/103

Total credits: 4
Internal marks: 25
External marks: 75

Course outcomes:

After the successful completion of the course, students will be able to:

1. Develop a critical understanding of different economic theories.
2. Take decisions about optimum production quantity which will minimise costs and maximise returns.
3. Understand different market structures and apply decisions methodologies to decide the best price of the product of the business.
4. Integrate economic theories with managerial practices to solve business problems.

Unit-I

Managerial Economics: Meaning, nature, scope & relationship with other disciplines, Role of managerial economics in decision Making, objectives of business firms, cardinal utility theory, indifference curve technique and the theory of consumer choice, consumer surplus, price effect combination of income effect and substitution effects.

Unit-II

Law of demand, demand elasticities, demand estimation and forecasting, Production Analysis, Law of variable proportions; laws of return to scale, Isoquants, Optimal Combination of Inputs

Unit-III

Theory of Cost: Traditional and Modern Theory of Cost in Short and Long runs, Economies and diseconomies of Scale, Revenue curves; Market Structures: Price-Output decisions under Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly; Shut down Point.

Unit-IV

Determinants of Economic Development. Recent Developments in Indian Economy. Business cycles; inflation; types and control methods. Monetary policy, Fiscal policy, Balance of payment of India; Trade deficit and remedies. FDI in India.

Suggested Readings:

1. T.R. Jain, Managerial Economics, V.K. Publication
2. K.K. Dewett, Modern Economic Theory, S. Chand Publication
3. D.N. Dwivedi, Managerial Economic, Vikas Publications

Note: Only latest available edition books are recommended.

BUSINESS MATHEMATICS
PAPER CODE: BBA/DIMK/104

Total credits: 3
Internal marks: 25
External marks: 75

Course Outcomes:

After the completion of the course, the students will be able to:

1. Understand the basic concepts of business mathematics
2. Develop basic skills for quantitative application in business situations.
3. Interpret and solve real-life business problems.
4. Understand matrices and other various mathematical concepts useful in daily life.

UNIT-I

Theory of Sets – Meaning, elements, types, presentation and equality of sets; union, intersection, compliment & difference of sets; Venn diagrams; Cartesian product of two sets; applications of set theory.

UNIT-II

Indices & logarithms, arithmetic and geometric progressions and their business applications; sum of first n natural numbers, sum of squares and cubes of first n natural numbers.

UNIT-III

Permutations, combinations and binomial theorem (positive index), Quadratic equations.

UNIT-IV

Matrices – Types, properties, addition, multiplication, transpose and inverse of matrix; properties of determinants, solution of simultaneous Linear Equations; differentiation and integration of standard algebraic functions; business applications of matrices, differentiation and integration.

SUGGESTED READINGS:

1. Sancheti, D.C., A.M. Malhotra & V.K. Kapoor, Business Mathematics, Sultan Chand & Sons, New Delhi
2. Zameerudin, Qazi, V.K. Khanna & S.K. Bhambri, Business Mathematics, Vikas Publishing House Pvt. Ltd, New Delhi
3. Reddy, R.JayaPrakash, Y. Mallikarjuna Reddy, A Text Book of Business Mathematics, Ashish Publishing House, New Delhi

Note: Only latest available edition books are recommended

ENGLISH - I
PAPER CODE: AEC-105-N1

Total credits: 2
Internal marks: 25
External marks: 75

Course Outcomes: After completion of the course, the students will be able to:

1. Learn about the foundation of English language
2. Familiarize with essentials of grammar of English language
3. Inculcate creative and aesthetic sensitivity and critical faculty through comprehension, appreciation and analysis of the prescribed literary texts.
4. Understand proper pronunciation and accent of English language

Unit I: Basic Grammar: Noun, Pronoun, Adjective, Verb, Adverb, Prepositions. Vocabulary Building: Suffix, Prefix, Synonyms, Antonyms,

Unit II: Essentials of Grammar-I: Articles, Subject-Verb agreement, Parts of Speech, Tenses

Unit III: Essentials of Grammar–II: Vowels, Consonants, Diphthongs, Clusters and Syllable, Direct and Indirect Speech.

Unit IV: Spoken English Communication: Speech Drills, Pronunciation, Accent Stress and Intonation

SUGGESTED READINGS:

1. Madhulika Jha, Echoes, Orient LongMan
2. Ramon & Prakash, Business Communication, Oxford.
3. Sydney Greenbaum Oxford English Grammar, Oxford.
4. M. Ashraf Rizvi, Effective Technical Communication, Tata McGraw Hill

Note: Only latest available edition books are recommended.

MANAGERIAL SKILLS DEVELOPMENT
PAPER CODE: BBA/DIMK/106

Total Credits: 3
Internal Marks: 25
Practical Marks: 75

Course outcomes: After the successful completion of the course, students will be able to:

1. Identify and foster self-capabilities for corporate readiness.
2. Learn the techniques of problem-solving and building positive interpersonal relationships.
3. Build teams and work in teams effectively.
4. Understand leadership styles and develop leadership qualities

Unit I

Understanding oneself (self-evaluation, ethics, values, personality assessment), Johari window, work life balance, stress management, time management, personality development and mindfulness.

Unit II

Problem-solving, creativity, and innovation; steps in analytical problem-solving; building positive interpersonal relationships; Supportive communication; Coaching and counselling; Principles of supportive communication.

Unit III

Team building; types of team; managing conflict and diversity; team effectiveness; leading team for high performance; leading positive change

Unit IV

Leadership and its types; characteristics of a leader; leadership development; Leadership games to understand leadership roles at various levels of the organization.

Suggested readings:

1. Wadkar, Alka. Life Skills for Success. Sage Publications.
2. Whetten, D.A, Cameron, K.S. Developing Management Skills. Prentice Hall
3. Hughes, R., Ginnett, R. and Curphy, G., Leadership: Enhancing the Lessons of Experience, McGraw Hill Education,
4. A. Chandramohan, Leadership and management, Himalaya Publishing House
5. Bhargava & Bhargava, Team Building & Leadership, Himalaya Publishing House

Note: Only latest available edition books are recommended.

ENVIRONMENT AND ECOLOGY
PAPER CODE: VAC-106-N1

Total Credits: 2
Internal Marks: 25
External Marks: 75

COURSE OUTCOMES:

At the completion of this course, the students will be able to:

1. Demonstrate knowledge of basics related to Environment and its components.
2. Understand the concepts of population ecology and human population
3. Analyze components of ecosystems and compare them with real life processes.
4. Interpret ecological phenomena of different ecosystems.

UNIT I:

Introduction to Environmental Studies:

Definition and Components of Environment, Relationship between the different components of Environment. Concept of biosphere, Atmosphere, lithosphere and hydrosphere; Components of atmosphere, Man and Environment Relationship, Impact of technology on Environment.

The Multidisciplinary nature of environmental studies. Definition; Scope and importance, need for public awareness.

UNIT-II:

Human population and Environment: Population growth, variation among nations. Population explosion – Causes, Effects and Control, Family welfare programme. Human right. Value Education, Women and Child Welfare.

Population Interactions and Adaptations: Neutralism; positive interactions-commensalism, proto cooperation, mutualism and symbiosis; negative interactions-competition, predation and parasitism; importance of negative interactions. Invasive species and pest control.

UNIT-III:

Concept of Ecosystem: Concept of an ecosystem. Definition, scope and significance of Ecology, Concept of habitat and ecological niche, Structure and function of an Ecosystem. Producers. Consumers and decomposers. Energy flow in the ecosystem. Ecological succession.

Food chains, food web and ecological pyramids.

UNIT IV:

Biomes: Concept; major biomes of the world; Introduction, types, characteristic features, structure and function of the following ecosystems: - Forest ecosystem Grassland ecosystem, Desert ecosystem and Aquatic ecosystems (ponds, streams, lakes rivers, oceans, estuaries).

REFERENCE BOOKS:

1. Brewer, R. The Science of Ecology, Sanders College Publishing Co., Tokyo, 1994.
2. Odum, E.P. Basic Ecology, W.B. Saunders, Philadelphia, 1983.
3. Jorgensen, Sven Erik. Encyclopedia of Ecology. Vol 1-5. Elsevier Publishers. Netherlands, 2008.
4. Kohli, R. K., Jose, S., Singh, H. P. and Batish, D. R. Invasive Plants and Forest Ecosystems. CRC Press / Taylor and Francis, 2009.
5. Odum, E.P., Barrick, M. and Barrett, G.W. Fundamentals of Ecology (5th Ed). Thomson Brooks/Cole Publisher, California, 2005.
6. Rana, S.V.S. Essentials of Ecology and Environmental Science (5th Ed), PHI Learning Pvt. Ltd, 2013.

Note: Only latest editions of the above books are recommended.

SEMESTER-II

INTRODUCTION TO DIGITAL MARKETING
PAPER CODE: BBA/DIMK/201

Total Credits: 4
Internal Marks: 25
External Marks: 75

Course Outcomes: After successful completion of the course, students will be able to:

1. Understand the importance of digital marketing in a rapidly changing business landscape.
2. Learn the key elements of a digital marketing strategy.
3. Examine how effectiveness of a digital marketing campaign can be measured.
4. Demonstrate knowledge and ability to implement common digital marketing tools such as SEO, SEM, social media and Blogs.

UNIT – I

Introduction to Digital Marketing (DIM) - Overview of Digital marketing; Meaning, Definition, Origin and Need of Digital marketing, History of DIM, Traditional Vs. Digital Marketing, Concept and approaches to DIM, Advantage and Disadvantage. Scope of DIM.

UNIT-II

Overview of various tools and modes of digital marketing. Display Ads. Mobile Marketing. Email Marketing- Need for Emails, Types of Emails and options in email advertising. Social media marketing, Content marketing and other forms of digital Marketing.

UNIT- III

Measurement Metrics- Digital Marketing Media, Budget Allocation, ROI for Digital Marketing, Analytics and Key Performance Indicators (KPI); Attribution Models and Frameworks.

UNIT- IV

Pitfalls of Digital Marketing. Good practices in digital marketing. Emerging technologies for Digital Marketing. Leading, management and governance of Digital Marketing teams. Digital Marketing for start-ups, MSMEs and rural enterprise. Future of digital marketing.

SUGGESTED READINGS:

1. Chaffey. D., E-Business and E-Commerce Management: Strategy, Implementation and Practice, Pearson Education India.
2. Kotler, P. Kartajaya, H and Setiawan, I., Marketing 4.0: Moving from Traditional to Digital, Wiley.
3. Tapp, A., & Whitten, I., & Housden, M; Principles of Direct, Database and Digital Marketing, Pearson.
4. Tasner, M; Marketing in the Moment: The Digital Marketing Guide to Generating More Sales and Reaching Your Customers First, Pearson Education.

NOTE: Only latest editions of the above books are recommended.

FINANCIAL ACCOUNTING
PAPER CODE: BBA/DIMK/202

Total Credits: 4
Internal Marks: 25
External Marks: 75

Course Outcomes: After completion of the course, students will be able to:

1. Understand the general purposes and functions of accounting.
2. Demonstrate calculation of depreciation by applying various methods.
3. Recognize the commonly used financial statements, their components and flow of information from business transactions into these statements.
4. Use & analyze the accounting information to support business processes and practices.

UNIT I

Meaning and scope of accounting, nature of financial accounting, Branches of accounting. Accounting principle: Concepts and Conventions. Application of Generally Accepted Accounting Principles (GAAP) in recording financial transactions and preparing financial statements.

UNIT II

Accounting Process: From recording of a business transaction to preparation of trial balance. Rectification of errors; Concept of depreciation, Methods of computing depreciation: straight line method and diminishing balance method.

UNIT III

Capital and revenue expenditures and receipts, Preparation of financial statements of non-corporate business entities: Trading account, profit and loss account, and balance sheet. Computerized Accounting System: Computerized accounts by using Tally software.

UNIT IV

Joint venture accounts. Accounting for Non-Profit Organisations: Meaning of Non-Profit Organisation; Significance of Receipt and Payment Account, Income and Expenditure Account and Balance Sheet; Preparation of Receipt and Payment Account, Income and Expenditure Account and Balance Sheet.

Suggested Readings and Learning materials:

1. Anthony, R. N., Hawkins, D., Merchant, K. A. Accounting: Text and Cases. New York: McGrawHill Education India.
2. Dam, B. B., Gautam, H. C. Financial Accounting. Guwahati: Gayatri Publications.
3. Monga, J. R. Financial Accounting: Concepts and Applications. New Delhi: Mayur Paperback Publishing.
4. Shukla, M. C., Grewal, T. S., Gupta, S. C. Advanced Accounts. New Delhi: Sultan Chand Publishing.
5. Maheshwari, S. N., Maheshwari, S. K., Maheshwari, S. K. Financial Accounting. New Delhi: Vikas Publishing House Pvt. Ltd.
6. Sehgal, D. Financial Accounting. New Delhi: Vikas Publishing House Pvt. Ltd.

Note: Only latest editions of the above books are recommended.

INDIAN BUSINESS ENVIRONMENT
PAPER CODE: BBA/DIMK/203

Total credits: 4
Internal marks: 25
External marks: 75

Course Outcomes: After successful completion of the course, students will be able to:

1. Understand dynamics of the business environment and current economic situation.
2. Develop a critical understanding of changes in business environment and assess threats and opportunities emerging out of it.
3. Suggest strategic adjustments for an organization which may be needed in changing business environment scenario.
4. Develop suitable adjustment and response strategies.

UNIT I

Business environment: concept, nature and significance. Economic, social, political forces affecting business operations & growth. Types of business environment. Environmental scanning.

UNIT II

Risk in business environment- country risk and political risk. Economic systems: capitalism, socialism & mixed economy. Economic planning in India: objectives, strategy and problems. Impact of economic planning in India. Economic roles of government: regulatory role, promotional role, entrepreneurial role, planning role, economic role in Indian context.

UNIT III

The constitutional environment and state intervention in business. Social responsibility of business: concept, rationale, dimensions and its disclosure by Indian business.

UNIT IV

Professionalization and business ethics. Competitive environment of business with reference to MRTP Act and Competition Act.

SUGGESTED READINGS:

1. Francis Cherunillam: Business Environment, Himalaya Publications.
2. Suresh Bedi: Business Environment, Excel Books.
3. Alok Goyal: Environment for Managers, V.K. Publications.
4. Justin Paul: Business Environment, Tata Mc-Graw Hill.

Note: Only latest available edition books are recommended.

APPLICATIONS OF BUSINESS STATISTICS
PAPER CODE: BBA/DIMK/204

Total Credits: 3
Internal Marks: 25
External Marks: 75

Course Outcomes: After the successful completion of the course, students will be able to:

1. Apply application of quantitative techniques in business decision making.
2. Analyze data using statistical techniques and able to forecast under uncertain business environment.
3. Examine normality and apply its concepts in different sampling techniques.
4. Apply quantitative techniques to business situations and optimize available resources.

UNIT I

Statistics: Meaning, purpose, scope and limitations; presentation and tabulation of data: meaning, objectives and types of classification, formation of frequency distribution, role types and construction of diagrams and graphs.

UNIT II

Measures of Central Tendency: Arithmetic mean, median, mode, characteristics, applications and limitations of these measures; Measure of variation: Range, quartile deviation, mean deviation and standard deviation, coefficient of variation and skewness.

UNIT III

Correlation Analysis: Introduction, significance, types and Methods of Correlation analysis – Scatter, diagram Karl Pearson's coefficient, Rank correlation. Regression Analysis: Introduction, significance, simple linear regression model, method of least squares, standard Error of estimates.

UNIT IV

Index Number: Introduction, importance, Construction, Price and Quantity index numbers, Laspeyres', Paasche's, Edgeworth-Marshall's, Fisher's method, Relative methods. Time series Analysis: Introduction, Utility of time series analysis, Components and analysis of time series. Measuring Trends of time series, semi-average, moving averages and method of least squares.

SUGGESTED READINGS:

1. Berry, G.C. Business Statistics, McGraw Hill Publication.
2. Gupta, S.P. & M.P. Gupta. Business Statistics, Sultan Chand and Sons Publication.
3. Gupta, C.B. An Introduction to Statistical Methods, Vikas Publishing House Pvt Ltd.
4. Gupta, S.P. Statistical Methods, Sultan Chand and Sons Publication.
5. Sharma, J.K. Business Pearson Education, New Delhi Statistics.

Note: Only latest available edition books are recommended.

ENGLISH - II
PAPER CODE: AEC-106-N1

Credit: 2
Internal Marks: 25
External Marks: 75

Course Outcomes: After completion of the course, the students will be able to:

1. Understand basics of narration and writing for effective communication.
2. Learn techniques of effective public speaking.
3. Write various kind of letter, essay and articles.
4. Practically perform reading and speaking through drills.

Unit I

Narration and Writing: Define, Describe, Narrate and Argue; Reading Comprehension, Precise Writing, Letter Writing - Job Application Letter, Resume writing, Report Writing.

Unit II

Introduction to Oratory: Techniques for effective public speaking, both prepared and extemporaneous. Brainstorm ideas for your own short speech.

Unit III

Written English communication: Progression of Thoughts/ideas, Structure of Paragraph, Structure of Essays, Essay Writing.

Unit IV

Writing Features and Articles: Op-Eds (Editorials, Opinions), Features; Articles; Performance and Drills: Reading Drills, Speaking Drills, Team-Performance Drills, Solo Performance Drills

SUGGESTED READINGS:

1. Madhulika Jha, Echoes, Orient LongMan
2. Ramon & Prakash, Business Communication, Oxford.
3. Sydney Greenbaum Oxford English Grammar, Oxford.
4. M.Ashraf Rizvi, Effective Technical Communication, Tata McGrawHill
5. Anjanees Sethi & Bhavana Adhikari, Business Communication, TataMcGrawHill

Note: Only latest available edition books are recommended.

INTRODUCTION TO R PROGRAMMING
PAPER CODE: BBA/DIMK/206

Total Credits: 3
Internal Marks: 25
Practical Marks: 75

Course Outcomes: After completion of the course, the students will be able to:

1. Install, and deploy the R package
2. Build new packages for sharing and reusability
3. Extract data from different sources and use it for data analysis
4. Design application for data analysis

Unit - I

Introduction to R: R interpreter, Basic understanding of R data structures like vectors, matrices, arrays, list and data frames, Control Structures.

Unit - II

Using R packages: Read/write data from/in files, extracting data from web-sites, Clean data, Transform data by sorting, adding/removing new/existing columns, centring, scaling and normalizing the data values, converting types of values, using string in-built functions,

Unit – III

Statistical analysis of data for summarizing and understanding data, Visualizing data using scatter plot, line plot, bar chart, histogram and box plot

Unit - IV

Designing Graphical User Interface: Building interactive application and connecting it with database, Building Packages

SUGGESTED READINGS:

1. Cotton, R., Learning R: a step by step function guide to data analysis. O'reilly Media Inc.
2. Gardener, M. Beginning R: The statistical programming language, WILEY
3. Lawrence, M., & Verzani, J. Programming Graphical User Interfaces in R. CRC press. (ebook)

Note: Only latest editions of the above books are recommended.

NATURAL RESOURCES AND BIODIVERSITY CONSERVATION
PAPER CODE: VAC-107-N1

Total credits: 2
Internal marks: 25
External marks: 75

Course Outcomes: At the completion of this course, the students will be able to:

1. Illustrate types of resources and consequences of resource degradation.
2. Appraise the food and land resources and role of individual in conservation of resources.
3. Interpret ecological and social phenomena from a biodiversity viewpoint.
4. Develop new conservation measures on new or endangered species in a given habitat.

UNIT-I:

Natural Resources: Renewable and non-renewable resources, Natural resources, and associated problems: **Forest Resources:** Use and Over-exploitation, deforestation. Case studies. Timber exaction mining, dams and their effects on forests and tribal people. **Water resources:** Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams, benefits, and problems. **Mineral resources:** Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

UNIT II:

Food Resources: World food Problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. **Energy resources;** Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, Case studies. **Land resources:** Land as a resource, Soil profile and horizons, Soil formation and degradation, man induced landslides, soil erosion and desertification. Role of and individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.

UNIT-III:

Biodiversity Uses, Threats and Conservation:

Introduction- Definition: genetic, species and ecosystem diversity, Biogeographical classification of India, Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values. Biodiversity at global, National and local levels. India as a mega-diversity nation.

Hot-spots of biodiversity, Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts, Endangered and endemic species of India.

UNIT-IV:

Conservation of Biodiversity: In-situ and Ex-situ conservation of biodiversity, Special Projects for endangered species: Project tiger, Project Gir lion, Project elephant and Project crocodile. Role of WWF, IUCN, UNEP, Red Data Book in restoration of endangered species.

REFERENCE BOOKS:

1. Joshi, B.D., Tripathi, C.P.M and Joshi, P.C. *Biodiversity and Environmental Management*. APH, New Delhi, 2009.
2. Joshi, P.C. and Joshi, N. *Biodiversity and conservation*. APH Publishing Co-operation, New Delhi, 2009.
3. Fatik B. Mandal and Nepal C. Nandi. *Biodiversity: Concepts, Conservation and Biofuture*, Asian Books, 2013.

SUGGESTED WEB SOURCES:

1. http://envis.nic.in/ENVIS_html/ENVISSubject/subject.html
2. <https://nptel.ac.in/courses/103/106/103106162/>
3. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=14>
4. <https://swayam.gov.in/>

Note: Only latest available edition books are recommended.