Sant Gadge Baba Amravati University Amravati
Diploma in Business Analytics (One Year Two Semester Course) [Semester 1] [CBCS]
Scheme for Teaching, Learning, Examination and Evaluation

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Examination Scheme						
			Teaching Period Per week				CREDITS			Theory			Practical		Total	Minimum
			L	T	P	Total	Theory	Practical	Total	Exam Duration	External	Internal	External	Internal		
1.	Statistics for Business Analytics	1DIBA1	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
2.	Accounting Fundamentals	1DIBA2	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
3.	Business Economics	1DIBA3	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
5.	Multivariate data analytics	1DIBA4	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
4.	Programming Fundamentals	1DIBA5	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
6.	Python Lab	1DIBA6	-	-	04	04	-	02	02	-	-	-	25	25	50	20
	Total		**20**	-	**02**	**24**	**20**	**02**	**22**						**550**	**220**

Sant Gadge Baba Amravati University Amravati
Diploma in Business Analytics (One Year Two Semester Course) [Semester 2] [CBCS]
Scheme for Teaching, Learning, Examination and Evaluation

Sr. No	Subject	Subject Code	Teaching & Learning Scheme							Examination Scheme						
			Teaching Period Per week				CREDITS			Theory			Practical		Total	Minimum
			L	T	P	Total	Theory	Practical	Total	Exam Duration	External	Internal	External	Internal		
1.	Introduction to E-Business	2DIBA1	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
2.	Mathematical Optimization for Business Problem	2DIBA2	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
3.	Database Management System and its Application	2DIBA3	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
4	Business Analytics	2DIBA4	04	-	-	04	04	-	04	3 Hr.	80	20	-	-	100	40
5	Project	2DIBA5	-	-	08	08		04	04	-	-	-	50	50	100	40
6	Internship*	2DIBA6	-	-	04	04		02	02	-	-	-	-	50	50	20
	Total		**16**	-	**12**	**28**	**16**	**06**	**22**						**550**	**220**

*** Internship Should be conducted after Ist semester till IInd semester in vacations for minimum 60 hrs. It's 2 credits will be reflected in final semester credit grade report.**

Sant Gadge Baba Amravati University Amravati
Diploma in Business Analytics (One Year Two Semester Course) [CBCS]
SYLLABUS SEMESTER - I

1DIBA1 - STATISTICS FOR BUSINESS ANALYTICS

COURSE OBJECTIVE:
To facilitate the decision-making process by quantifying the element of chance or uncertainties.
COURSE DETAILS:
Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Introduction to Statistical Methods	Definition and scope of Statistics, concepts of statistical population and sample. Data: quantitative and qualitative, attributes, variables, scales of measurement nominal, ordinal, interval and ratio. Presentation: tabular and graphical, including histogram and ogives, consistency and independence of data with special reference to attributes **(14 Hrs.)**
Unit II Statistics in Management and Sampling Techniques	Significance of Statistics in Management domain, Difference between Population and Sample studies, non-probability sampling methods, Probability sampling methods, Sampling errors, non-sampling errors and their remedies, Selection of suitable sample size**(12 Hrs.)**
Unit III Measures of Central Tendency	Measures of central tendency and dispersion: Mean, median, Mode, Harmonic mean, geometric mean, **(10 Hrs.)**
Unit IV Dispersion	Merits, limitations & Suitability of averages, Absolute & Relative measures of dispersion, range, Quartile deviations, mean Deviation, Standard deviation **(12 Hrs.)**
Unit V Index Numbers and Consumer Price Indices	Index Numbers: Definition, construction of index numbers and problems thereof for weighted and unweighted Fisher's. Chain index numbers, conversion of fixed based to chain-based index numbers and vice-versa. Consumer price index numbers **(12 Hrs.)**

REFERENCE:

1. **Business Statistics: Text and Problems - With Introduction to Business Analytics**
   N. D. Vohra, 2nd Edition, Tata McGraw Hill Publishers, 2021
2. **Statistical Methods**
   S. P. Gupta, 43rd Edition, Sultan Chand Publishers, 2014
3. **Business Statistics**
   Digambar Patri, D. N. Patri, 3rd Edition, Kalyani Publishers, 2014
4. **Fundamentals of Statistics, Vol. I & II**
   A. M. Goon, M. K. Gupta, B. Dasgupta, 8th Edition, The World Press, Kolkata, 2002

1DIBA2 - ACCOUNTING FUNDAMENTALS

COURSE OBJECTIVE:
To provide students with a comprehensive understanding of fundamental accounting principles, processes, and financial reporting. This course aims to develop analytical and practical skills in recording, classifying, and interpreting financial information for decision-making in business and organizational contexts.

COURSE DETAILS:
Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Introduction to Accounting	Definition and Role of Accounting, Accounting Principles and Concepts, Accounting Equation, Types of Business Entities, Accounting Cycle, Double-Entry Accounting, Chart of Accounts, Ethical Issues in Accounting **(12 Hrs.)**
Unit II Recording Transactions	Debits and Credits, Journal Entries, General Ledger, Trial Balance, Adjusting Entries, Accrual Accounting, Prepaid and Unearned Revenue, Closing Entries **(12 Hrs.)**
Unit III Financial Statements	Income Statement, Statement of Retained Earnings, Balance Sheet, Statement of Cash Flows, Financial Statement Analysis, Accounting Ratios, Cash vs. Accrual Accounting, Interpreting Financial Statements **(12 Hrs.)**
Unit IV Accounting for Assets and Liabilities	Accounts Receivable and Bad Debt, Inventory Valuation, Property, Plant, and Equipment, Intangible Assets, Current and Non-current Liabilities, Bonds and Long-Term Debt, Leases and Contingent Liabilities, Accounting for Income Taxes **(12 Hrs.)**
Unit V Control and Evaluation	Cost Accounting, Budgeting and Forecasting, Accounting for Non-Profit Organizations, International Accounting Standards, Ethics in Accounting and Reporting, Audit and Assurance Services, Fraud Examination, Recent Developments in Accounting **(12 Hrs.)**

REFERENCE:

1. **Financial Accounting** – T.S. Grewal, S. Chand Publishing
2. **Accounting Principles** – Jerry J. Weygandt, Paul D. Kimmel, Donald E. Kieso, Wiley India
3. **Financial Accounting: A Managerial Perspective** – R. Narayanaswamy, PHI Learning
4. **Introduction to Financial Accounting** – Charles T. Horngren, Pearson Education
5. **Corporate Accounting** – S. N. Maheshwari & S. K. Maheshwari, Vikas Publishing

1DIBA3 - BUSINESS ECONOMICS

COURSE OBJECTIVE:

To provide students with a foundational understanding of economic principles and their application in business decision-making. This course emphasizes both microeconomic and macroeconomic concepts, with a focus on analyzing economic trends, understanding markets, and applying economic reasoning to real-world business problems.

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Introduction to Economics	Definition and Scope of Economics, Microeconomics vs. Macroeconomics, Economic Systems, Key Economic Concepts, Supply and Demand **(12 Hrs.)**
Unit II Microeconomic Analysis	Consumer Behavior and Utility, Elasticity of Demand and Supply, Production and Cost Analysis, Market Structures, Pricing and Output Decisions **(12 Hrs.)**
Unit III Macroeconomic Analysis	National Income and GDP, Unemployment and Inflation, Aggregate Demand and Supply, Fiscal Policy and Government Spending, Monetary Policy and the Central Bank **(12 Hrs.)**
Unit IV International Economics	Trade and Comparative Advantage, Exchange Rates and Currency Markets, Balance of Payments, Globalization and Trade Policy, Economic Integration **(12 Hrs.)**
Unit V	Business Cycles and Economic Forecasting, Economic Decision-Making in

Applied Business Economics	Business, Economic Factors in Strategic Planning, Ethical and Social Responsibility in Economics, Emerging Economic Trends and Challenges **(12 Hrs.)**

REFERENCE:

1. **Managerial Economics** – D. N. Dwivedi, Vikas Publishing
2. **Principles of Economics** – N. Gregory Mankiw, Cengage Learning
3. **Business Economics** – H. L. Ahuja, S. Chand Publishing
4. **Managerial Economics: Concepts and Applications** – Thomas & Maurice, McGraw-Hill
5. **Business Economics** – P. L. Mehta, Sultan Chand & Sons

1DIBA4 - MULTIVARIATE DATA ANALYTICS

COURSE OBJECTIVE:
To find patterns and correlations between several variables simultaneously
COURSE DETAILS:
Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Bivariate Data and Curve Fitting	Bivariate data: Definition, scatter diagram, simple, partial and multiple correlation (3 variables only), rank correlation, principle of least squares, fitting of polynomials and exponential curves **(12 Hours)**
Unit II Correlation Analysis	Simple correlation, scatter diagram, calculation of correlation coefficient, probable error, rank correlation and its applications **(12 Hours)**
Unit III Regression Analysis	Linear regression, model for prediction, multiple regression, method of least squares **(12 Hours)**
Unit IV Time Series and Trend Analysis	Time series and its components with illustrations, additive, multiplicative and mixed models, determination of trend by least squares and moving average methods **(12 Hours)**
Unit V Growth Curves and Seasonal Indices	Growth curves and their fitting: modified exponential, Gompertz and logistic curves, determination of seasonal indices: ratio to moving average, ratio to trend, and link relative methods **(12 Hours)**

REFERENCE:

1) **Fundamentals of Statistics**, Vol. I & II – *Goon A.M., Gupta M.K., Dasgupta B.*, 8th Edn., The World Press, Kolkata (2002)
2) **John E. Freund's Mathematical Statistics with Applications** – *Irwin Miller, Marylees Miller*, 7th Edn., Pearson Education Asia (2006)
3) **An Introduction to Multivariate Statistical Analysis** – *T.W. Anderson*, 3rd Edn., John Wiley (2003)

1DIBA5 - PROGRAMMING FUNDAMENTALS

COURSE OBJECTIVE:
To equip students with practical knowledge of Python programming and its application in data analysis. The course covers Python fundamentals, file handling, object-oriented programming, and essential libraries like NumPy and pandas for data manipulation and visualization.

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit	Content
Unit 1 Introduction To Python	**Python Programming Basics**: Python Features, Identifiers, Reserved Words, Indentation, Comments; Built-in Data Types (Strings, Lists, Tuples, Dictionaries, Sets) and their Methods; Type Conversion; Operators. **(14 Hours)**
Unit 2 Decision making and Looping	**Control Flow**: Decision Making (if, else), Looping (for, while), Loop Control Statements. **Functions**: User-Defined Functions, Function Arguments and Types. **(11 Hours)**
Unit 3 File, Exception Handling And OOP	**File Handling and Exception Handling**: User-Defined Modules and Packages; File Operations (Manipulation, Methods for Files and Directories); Python Exception Handling. **Object-Oriented Programming (OOP)**: Classes and Objects; Constructors, Data Hiding, Abstraction, Inheritance. **(11 Hours)**
Unit 4 Introduction To Numpy	**NumPy Basics:** Arrays and Vectorized Computation, The NumPy ndarray, Creating ndarrays, Data Types for ndarrays. **Arithmetic with NumPy Arrays:** Basic Indexing and Slicing , Boolean Indexing, Transposing Arrays and Swapping Axes. **Universal Functions:** Fast Element-Wise Array Functions, Mathematical and Statistical Methods, Sorting, Unique and Other Set Logic**(12 Hours)**
Unit 5 Data Manipulation, Cleaning, And Visualization With Pandas	**Data Structures and Manipulation**: Introduction to pandas (Series, DataFrame); Indexing, Selection, Filtering; Function Application, Mapping, Sorting, and Ranking; Summarizing Data (Descriptive Statistics, Unique Values, Value Counts). **Data Cleaning and Transformation**: Handling Missing Data, Removing Duplicates, Data Transformation (Using Functions, Mapping, Replacing Values), Detecting and Filtering Outliers. **String Manipulation**: Vectorized String Functions in pandas. **Data Visualization**: Plotting with pandas (Line, Bar, Histogram, Density, Scatter/Point Plots) **(12 Hours)**

REFERENCE:

1) Y. Daniel Liang, “Introduction to Programming using Python”, Pearson,2012.
2) Wes McKinney, “Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython”, O’Reilly, 2nd Edition,2018.
3) Jake VanderPlas, “Python Data Science Handbook: Essential Tools for Working with Data”, O’Reilly, 2017.
4) Wesley J. Chun, “Core Python Programming”, Prentice Hall,2006.
5) Mark Lutz, “Learning Python”, O’Reilly, 4th Edition, 2009.

1DIBA6 - PYTHON– LAB

COURSE DETAILS:

Total Credit: 2 **Hours/Week**: 4

NOTE:

The list suggests the program set. Hence, the concerned staff may modify the list as needed (minimum 15).

Introduction

a) Implement basic Python programs for reading input from console.
b) Perform Creation, indexing, slicing, concatenation and repetition operations on Python built-in data types: Strings, List, Tuples, Dictionary, Set
c) Solve problems using decision and looping statements.
d) Apply Python built-in data types: Strings, List, Tuples, Dictionary, Set and their methods to solve any given problem.

File Handling

a) Create packages and import modules from packages.
b) Perform File manipulations- open, close, read, write, append and copy from one file to another.
c) Handle Exceptions using Python Built-in Exceptions
d) Solve problems using Class declaration and Object creation.

Numpy

a) Create NumPy arrays from Python Data Structures, Intrinsic NumPy objects and Random Functions.
b) Manipulation of NumPy arrays- Indexing, Slicing, Reshaping, Joining and Splitting.
c) Computation on NumPy arrays using Universal Functions and Mathematical methods.

SYLLABUS SEMESTER - II

2DIBA1 - INTRODUCTION TO E-BUSINESS

COURSE OBJECTIVE:

To introduce students to the foundational concepts, infrastructure, and strategies of e-business. The course explores online retailing, digital marketing, legal frameworks, and emerging technologies to prepare students for managing business in the digital economy.

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I E-Business	What is E-Business? History and Evolution of E-Business, E-Business Models, E-Business vs. Traditional Business, E-Business Opportunities and Challenges **(12 Hours)**
Unit II E-Business Infrastructure	Internet and Web Technologies, E-Commerce Platforms and Payment Systems, Web Hosting and Domain Registration, Security in E-Business, Mobile and Cloud Technologies in E-Business **(12 Hours)**
Unit III E-Commerce and Online Retailing	E-Commerce and Online Shopping, Business-to-Consumer (B2C) E-Commerce, E-Commerce Website Development, Customer Experience and User Interface, Online Payment Methods **(12 Hours)**
Unit IV E-Business Strategies and Marketing	E-Business Strategy Development, Digital Marketing and SEO, Social Media in E-Business, Email Marketing and Online Advertising, Content Management and E-Business Promotion, E-Business Laws and Regulations **(12 Hours)**
Unit V Emerging Trends and Technologies in E-Business	Artificial Intelligence and Machine Learning in E-Business, Blockchain in E-Commerce, Internet of Things (IoT), Personalization and Recommendation Systems, Sustainable and Green E-Business Practices **(12 Hours)**

REFERENCE:

1. **E-Business and E-Commerce Management** – Dave Chaffey, Pearson Education
2. **Electronic Commerce: A Managerial Perspective** – Efraim Turban et al., Pearson Education
3. **E-Commerce: Strategy, Technologies and Applications** – David Whiteley, McGraw-Hill
4. **Digital Business and E-Commerce Management** – Kenneth C. Laudon & Carol G. Traver, Pearson
5. **E-Business Essentials** – Jim Hamill & Chia-Wei Wang, Routledge

2DIBA2 - MATHEMATICAL OPTIMIZATION FOR BUSINESS PROBLEM

COURSE OBJECTIVE:

To facilitate the decision-making process by optimizing business problems, incorporating the element of chance or uncertainties through mathematical modeling, analysis, and practical application.

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Linear Optimization	Building Linear optimization model, solving linear optimization problem graphically, simplex algorithm, application of linear optimization, sensitivity analysis **(12 Hours)**
Unit II	Types of integer, linear programming models, Graphical solution to the all integer

Integer linear programming	problems, applications involving 0-1 variable, Product design and market share optimization **(12 Hours)**
Unit III Decision Analysis	Making decision with uncertain information, Average pay off strategy, aggressive strategy, conservative strategy, opportunity loss strategy, Decision strategy to maximize objective, Decision tree analysis. **(12 Hours)**
Unit IV Transportation Problems	Assignment, Transportation models, Aggregate planning models, worker scheduling models, logistic models and sensitivity analysis, aggregate planning models, fixed cost models. **(12 Hours)**
Unit V Simulation and AHP	Introduction to simulation, basic steps in simulation, uses of simulation in business, advantages of simulation, introduction to Analytic Hierarchy Process (AHP), steps of AHP, simple applications of AHP in decision-making **(12 Hours)**

REFERENCE:

1. **Management Science Modeling with Spreadsheets** – Albright and Winston, Cengage Learning, Indian Edition, 3rd Indian Reprint, 2011
2. **Business Analytics: Data Analysis & Decision Making** – Albright and Winston, Cengage, 5th Edition, 2015
3. **Operations Research: An Introduction** – Taha H.A., Pearson Education
4. **Introduction to Operations Research** – Hillier and Lieberman, Tata McGraw-Hill
5. **Operations Research: Principles and Practice** – Ravindran, Phillips & Solberg, Wiley India

2DIBA3 - DATABASE MANAGEMENT SYSTEM AND ITS APPLICATION

COURSE OBJECTIVE:

To equip students with fundamental knowledge of databases, data models, ER modeling, SQL, normalization techniques, and practical applications of relational databases to support efficient and structured data management.

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Introduction to DBMS	Data, database, database management system, advantages of DBMS over file system, structure of DBMS, three levels of data abstraction, instance, schema, data independence **(12 Hours)**
Unit II Data Models and ER Model	Data models, entity, attributes, relationships, mapping, cardinalities, participation constraints, ER diagram and examples **(12 Hours)**
Unit III Relational Model and Query Languages	Structure of relational database, relational algebra, relational calculus, Codd's rules, Query By Example (QBE) **(12 Hours)**
Unit IV SQL and Data Manipulation	Basics of SQL, SQL queries, SELECT statements, INSERT, UPDATE, DELETE operations, simple joins, sorting, filtering **(12 Hours)**
Unit V Relational Database Design	Functional dependency, multivalued dependency, anomalies, normalization (1NF, 2NF, 3NF, BCNF), join operations, overview of schema refinement **(12 Hours)**

REFERENCE:

1. **Database System Concepts –** Abraham Silberschatz, Henry F. Korth, S. Sudarshan
2. **Fundamentals of Database Systems –** Ramez Elmasri & Shamkant B. Navathe

3. **An Introduction to Database Systems** – C. J. Date
4. **Database Management Systems –** Raghu Ramakrishnan, Johannes Gehrke

2DIBA4 - BUSINESS ANALYTICS

COURSE OBJECTIVE:

1. To make students understand the essentials of Business analytics and the corresponding terminologies.
2. To help students to analyze the steps involved in the Business Analytics process
3. To Illustrate competently on the topic of analytics
4. Enable students to Understand & Implement the Clustering algorithm
5. To demonstrate the real time scenario by using Business Analytics Techniques

COURSE DETAILS:

Total Credit: 4 **Hours/Week**: 4

CONTAINS:

Unit Title	Topics Covered
Unit I Business Intelligence	Introduction - History and Evolution: Effective and Timely decisions, Data Information and Knowledge, Architectural Representation, Role of mathematical Models, Real Time Business Intelligent System. **(12 Hours)**
Unit II Data Mining &Warehousing	Data Mining - Introduction to Data Mining, Architecture of Data Mining and How Data mining works (Process) , Functionalities & Classifications of Data Mining, Representation of Input Data, Analysis Methodologies. Data Warehousing - Introduction to Data Warehousing, Data Mart, Online Analytical Processing (OLAP)– Tools, Data Modelling, Difference between OLAP and OLTP, Schema– Star and Snowflake Schemas, ETL Process – Role of ETL **(14 Hours)**
Unit III Data Preparation	Data Validation - Introduction to Data Validation, Data Transformation – Standardization and Feature Extraction, Data Reduction – Sampling, Selection, PCA, Data Discretization **(11 Hours)**
Unit IV Data Analytics Process	Analytics Process - Introduction to analytics process, Types of Analytical Techniques in BI – Descriptive, Predictive, Perspective, Social Media Analytics, Behavioral, Iris Datasets **(11 Hours)**
Unit V Business Analytics Process	Operational Intelligence: Technological – Business Activity Monitoring, Complex Event Processing, Business Process Management, Metadata, Root Cause Analysis. **(12 Hours)**

REFERENCE:

1. **Carlo Vercellis**, Business Intelligence: Data Mining and Optimization for Decision Making, First Edition.
2. **Drew Bentley**, Business Intelligence and Analytics, Library Press. ISBN: 978-1-9789-2136-8.
3. **Larissa T. Moss & Shaku Atre**, Business Intelligence Roadmap: The Complete Project Lifecycle for Decision-Support Applications, First Edition, Addison-Wesley Professional, 2003
4. **Ralph Kimball, Margy Ross, Warren Thornthwaite, Joy Mundy, Bob Becker**, The Data Warehouse Lifecycle Toolkit: Practical Techniques for Building Data Warehouse and Business Intelligence
5. **Cindi Howson**, Successful Business Intelligence, Second Edition, McGraw-Hill Education, 2013

2DIBA5 - Project

COURSE DETAILS:

Total Credit: 04 **Hours/Week**: 08

COs:

On successful completion of this course, students would be able to

- aware about the survey of literature.
- formulate the problem and apply the suitable techniques for solution
- write the dissertation /Project

  Students enrolled in the Diploma in Business Analytics must undertake a project to demonstrate their understanding and practical application of analytics concepts, tools, and techniques. This capstone project reflects their learning and industry readiness.

Semester II	**Particulars**	**System of marks and Credit**		
		Total Credit:04		**Minimum Passing**
		Practical Internal	**Practical External**	
Project	Submission	50	---	40
	Presentation	--	30	
	Viva-voce	--	20	
	Total Marks	50	50	

2DIBA6 – Internship

COURSE DETAILS:

Total Credit: 02 **Total Hours**: 60

COs:

On successful completion of this course, students would be able to

- be competent professionals for the industry as student exposed to the industrial environment.
- learn, understand and sharpen the real time technical skills required at the job
- quest for knowledge and its applicability on the job
- learn to apply the technical knowledge in real industrial situations
- gain experience in writing technical reports/projects
- Understand the psychology of the workers and their habits, attitudes and approach to problem solving

Semester II	**Particulars**	**System of marks and Credit**		
		Total Credit:02		**Minimum Passing**
		Practical Internal	**Practical External**	
Internship	Report Submission	30	---	20
	Presentation	--	---	
	Viva-voce	20	---	
	Total Marks	50	---	

Sant Gadge Baba Amravati University Amravati
Faculty: Commerce and Management
One Year- Two Semester- Diploma in Business Analytics
Instructions for Paper Setters
For Subjects having Maximum 80 Marks

Duration of Exam – 3 Hrs		Max. Marks 80
Question No. 1	10 MCQs (2 from each unit)	Marks 10
Question No. 2	05 Fill in Blank (1 from each unit)	Marks 05
Question No. 3	05 Questions Answer in One Sentence (1 from each unit)	Marks 05
Question No. 4 to 8	Each question having internal choice (4 from each unit) as follows: Q.a) Long answer Question for 08 Marks Q.b) Short answer Question for 04 Marks OR Q.c) Long answer Question for 08 Marks Q.d) Short answer Question for 04 Marks	Marks 60