

THIRD B.Com.

Compulsory Subject

1 Paper 3 Hours 100 Marks

1. Compulsory English-3
2. Principles of Auditing
3. Business Environment
4. Management Accounting
5. Compulsory Statistics

Elective Subject (Any one of the following)

1. Accounting and Finance Paper-2
2. Accounting and Finance Paper-3

OR

1. Banking Paper-2
2. Banking Paper-3

OR

1. Statistics Paper-2
2. Statistics Paper-3

OR

1. Computer Science Paper-2
2. Computer Science Paper-3

Paper-3.1 : Compulsory English-3

Text : Pride and Prejudice by Jane Austen Marks 40
(Orient Longman Easy Readers Grade 6)

Evaluation Pattern :

Long Answer Question [1 out of three]	Marks	12
Short note [1 out of 3]	Marks	08
References		10 Marks
Short answer questions		10 Marks
Advertisements		10 Marks
Translation from Guj. to Eng. and vice versa	5 - 5	10 Marks
Press Report		10 Marks
Questionnaire		10 Marks
Comprehension of a Share Market Report	Marks	10
Reshaping the Story		10 Marks
	Total	00 1
		Marks

Example : (Reshaping the Story)

The famous tale of the fox and sour grapes may be re-shaped as follow :

After a few futile attempts. When Kallu the fox could not reach the mouthwatering grapes. He suddenly thought of seeking help of his friend. Bholu the donkey. He invited the donkey to see the ripe grapes. Bholu was tempted too to the hanging delicacy. He also tried but in vain. Kallu suggested that if they tried together, perhaps, they might win. He told Bholu to stand still. He jumped on to the back of Bholu. And lo! The grapes were all theirs. He plucked many ripe bunched and got down. They both shared the grapes and uttered happily, "How sweet are our grapes."

The same story can be developed further giving it a yet never turn. The aim of this exercise is to develop creative and original thinking among the student and many such tales may be pursued e.g. the shepherd's false alarms. Tortoise and the hare two goats on a bridge, father and son on a donkey. The deer with beautiful Anders etc.

Paper-3.2 : Auditing

UNIT - 1 : Marks

25

1. **Introduction to Auditing** : Meaning, Objectives and scope of Auditing.
2. **Types of Audit.**
3. **Internal check system, Internal control and internal Audit.**

UNIT - 2 : Marks

25

1. **Audit Process** Consideration for commencing an audit, Routine checking and Test checking.
2. **Vouching of various transactions, books etc.**
3. **Verification of Assets and liabilities.**

UNIT - 3 : Marks

25

Audit of Limited Companies : (as under)

- (A) **Company Auditor** Appointment and removal of company auditor.
Qualifications and Disqualifications of company auditor.
Powers, Duties and Liabilities of company auditor.
- (B) **Auditors Report** Standard Report and Qualified Report.
- (C) **Divisible Profit and Dividend.**

UNIT - 4 : Marks

25

1. **Audit Programme.**
2. **Need, Requirement and Procedure of**
 - (i) Audit of Educational Institute
 - (ii) Audit of Public Trust.
 - (iii) Audit of Co-operative Bank
 - (iv) Special Audit of Commercial Bank.
3. **Recent Trends in Auditing :**
 - (i) Nature and Significance of Cost and Management Audit.
 - (ii) Audit of Computerized Accounts.

Paper-3.3 : Business Environment

UNIT - 1 : Indian Business Environment

1. The concept of Business Traditional and Modern Concepts
2. Meaning of Environment
3. "Business Environment" - Clarification of Macro Aggregative Concept.
4. Main integral units of Business Environment (Demand, Consumption, Economic Policy, Legal System, Technology, Economic Institutions)

UNIT - 2 : A Bird's Eye-View of different concept in the field of economics Indicators (measures) and Sectors.

1. Income Trends of National and Per Capital Income.
- Co relation of Income and Business Environment.
2. Savings Trends of Savings during the last decade.
- Co-relation of Savings and Business Environment.
3. Investment : - Quantum of local investments in plans.
- With reference to income and savings.
4. Industries : - Features of Indian Industries.
- Problems of Cottage and Small Scale Industries.
5. Agriculture : - Problem of low agriculture productivity in India.
- Effects of new Agriculture Strategy.

UNIT - 3 : Problems of Economic development in the context of India.

1. India as a developing county.
2. Unemployment Meaning - Reasons - Effects of Unemployment with reference to business environment.
3. Poverty Meaning, with reference to Modern Trends.
- Reasons. - Remedies for eradication of Poverty with reference to business opportunities.
4. Inflation Trends - Reasons - Remedies.

UNIT - 4 : Role of Govt. and its policies in Indian Economy

1. Monetary Policy :
 - Its effects on Indian Business Environment.
2. Fiscal Policy :
 - Its importance in the concept of Welfare State.
 - Its effect on Business Environment.
3. Industrial Policy :
 - Current Industrial Policy - Its effects on Business Economy
 - Special Economic Zone SEZ
4. Process of Privatization and Disinvestment
 - Meaning
 - Need of Privatization in Indian economy.
 - Effects of Privatization in the field of development of Business
5. Import-Export Policy
 - Main provision of recent Import-Export Policies with reference to globalization.
6. Foreign Investment
 - Modern trends of foreign investment in India.

UNIT - 5 : Planning in India

1. Current Five Year Plan
 - Objectives and main programmes
 - Sectoral Allocation of resources.
2. Overall evaluation of planning.

UNIT - 6 : INTERNATIONAL ENVIRONMENT :

1. A overview of the main recent trends of business environment at global Level.
 2. International Monetary and Financial Institution
 - 1. World Bank
 - 2. W.T.O.
 - 3. Asian Development Bank
-] With reference to Indian Economy

Paper-3.4 : Management Accounting

(1) Introduction

Meaning, Nature, Scope and functions of Management Accountancy. Role of Management accounting in decision making, Management accounting Vs Financial Accounting, Tools and techniques of Management Accounting.

(2) Ratio Analysis

Meaning, Nature, Classification of Ratios, Profitability ratios, Activity ratios, Leverage ratios, Liquidity ratios, Advantage of ratio analysis, Limitations of Accounting ratios. (Only calculation of Ratio and their interpretation).

(3) Fund Flow Statements

(4) Cash Flow Statements (As per AS-3)

(5) Marginal Costing

Meaning of Marginal cost & Marginal costing, Advantages & limitations of Marginal Costing, Marginal Costing as a tool for decision making, Break-even-point, P.V. ratio, Margin of Safety, Key factor (Only one variable).

(6) Standard Costing

Meaning of Standard cost and standard costing, Advantage & limitations, Application, Practical problems regarding Material variances only.

(7) Budgeting for profit planning and control

Meaning of Budgets and Budgetary controls, Objectives, Advantages & limitations of budgetary control, Practical Problems regarding with Fix and Flexible Budgets.

(8) Cash Budgets

(9) Capital Budgeting

Nature of Capital Expenditure, Importance of Capital expenditure forecast, Methods of Investment proposals

1. Pay Back Method

2. Average rate of return Method

3. Discounted cash flow Method

Note : Maximum 20 Marks for theoretical questions.

Paper-3.5 : Compulsory Statistics

- 1. Probability : 10%**
Combination (Only Introduction), Concept of Probability, Mathematical and Statistical definition of Probability. definitions of different terms : (random experiments, sample space, types of events, independent events etc. Addition law, Conditional law and Multiplication law for two or three events with proof. Typical Examples.
- 2. Probability Distribution : 10%**
Concept of discrete random variable and its probability distribution. Mathematical expectation of a discrete random variable. Mean and Variance of discrete probability distribution. Properties and applications of Binomial, Poisson and Normal Distributions without proof. Typical Examples.
- 3. Linear Correlation : 10%**
Definition of Variables. Meaning and definition of Correlation. Types of Correlation. methods for Correlation (1) Scatter diagram methods (2) Karl Pearson's method (3) Spearman Rank method. Probable Error and Standard Error of Coefficient of Correlation. Coefficient of Correlation from Bivariate frequency distribution. Application of Correlation and Properties of Correlation with Proof.
- 4. Linear Regression : 10%**
Meaning and definition of Regression. Definition of Regression Coefficients. Properties of Regression Coefficient. And relation between Correlation and Regression Coefficient. Two lines of Regressions. Coefficient of Determination. Regression coefficients from the bivariate frequency distribution. Application of Regression. Typical Examples.

5. Association of Attributes :

10%

Association of two attributes. Types of Association of two attributes. Order of classes. Consistency of data for two attributes. Methods of studying Association of Attributes (1) Comparison of Expected Frequencies (2) Comparison of Proportions (3) Yule's Coefficient of Association. Coefficient of Colligation. Relationship Between Coefficient of Association and Colligation. Typical Examples.

6. Sampling :

10%

Idea of Population and Sample. Advantages of Sampling and Limitation of Sampling. Census Enumeration and Sample Enumeration Characteristics of good Sample. With and Without Replacement Sampling. Sampling and Non-Sampling Errors Sampling Methods (1) Simple Random Sampling (2) Stratified Simple Random Sampling (3) Systematic Sampling (Only description of these three methods). Drawing of all possible random samples of a given size (two or three) from a population (with and without replacement). Calculation of Variance of Simple Random Sample Mean Stratified Sample Mean (two or three strata only) and Systematic Sampling Typical Examples.

7. Index Numbers :

10%

Meaning and Definition of Index Numbers. Uses and Limitation of Index Number Construction of Wholesale Price Index Number. Methods of Calculation of index Numbers (1) Laspeyre's Method (2) Paasche's Method (3) Fisher's Method (4) Bowley's Method (5) Marshal Edgeworth's Method. Two main tests of Index Numbers. Aggregate expenditure and Family Budget Methods. Typical Examples.

8. Business Forecasting :

10%

Meaning, Uses of Time Series Analysis. Components of Time Series. Methods of Finding trend by method of Least Squares and Method of Moving Averages Examples of Linear Trend and Non-Linear Trend (only second degree). Seasonal Variation by Moving Average Method Computation of Seasonal Index Numbers. Short Time Variation And Irregular Variation. Exponential Smoothing Technique. Input Out put Analysis.

9. Progressions :

10%

Definition. Types of Progression (1) Arithmetic Progression (A.P.) (2) Geometric Progression (G.P.) (3) Harmonic Progression (H.P.) nth term and Sum of First n terms of A.P. G.P. H.P. with Proof. Relation between A.M. G.M. H.M. for two positive unequal numbers. Typical Examples.

10. Linear Programming

10%

Meaning, Assumptions and Limitations of L.P. Use of L.P. in different fields with illustrations. Definitions Constraints, Objective function. Solution, Feasible Solution, Basic Feasible Solution, Slack variable, Surplus Variable etc. Mathematical Formulation of the L.P. Problem. Optimum Solution of L.P.P. by (1) Graphical Methods. Typical Examples.

Reference Books :

- (1) Basic Statistics by : B. L.Agrawal, Wiley Eastern Ltd.
- (2) Elements of Statistics (In Gujarati) B. S. Shah Publication A'bad.
- (3) Elements of Statistics (In Gujarati) C. Jamnadas Company A'bad.
- (4) Fundamentals of Statistics by : Sancheti & Kapoor Sultanechand & Sons Publication, New Delhi.
- (5) Fundamentals of Mathematical Statistics by : Kappo And Gupta Sulatanchand & Sons Publication, New Delhi.
- (6) Statistical Methods (In Gujarati) Part I, II, III and IV Mayur Publication, A'bad.

Accounting and Finance Paper-2

Any one of the following is to be selected by the student

Unit - 1 : Accounting :

70%

- (1) **LeaAccounting (Theory only)**
- (2) **Farm Accounting**
- (3) **Branch Accounting**
(Excluding Wholesale Branch and Foreign Branch)
- (4) **Accounts of fire claims**
- (5) **Process costing with special reference to Inter process profit**
(Excluding Incomplete Units)
- (6) **Operating Costing for Hotels, Hospitals & Theatres**
- (7) **Replacement Account**

Unit - 2 : Finance :

30%

- (1) **Management of working Capital**
(Concept - need - tyeps - utility - sources and adequacy of working capital management of working capital - overtrading and undertrading).
- (2) **Management of Cash and Receivables**
(Problems at Introductory Level only)
- (3) **Management of Inventory**
(Problems at Introductory Level only)

Note : Maximum 20 Marks for theoretical questions.

Accounting and Finance Paper-3

Unit - 1 : Accounting : 70%

- (1) **Accounting for Holding Companies**
(as per Section 212 of Indian Companies Act.)
- (2) **Single Entry Accounting System**
(Only Conversion of Single Entry into Double Entry)
- (3) **Accounting for Professionals**
- (4) **Valuation of Goodwill**
- (5) **Valuation of Shares**
- (6) **Investment Accounts** (As per Indian Tradition)
- (7) **Accounts of Electricity Supply Companies**
(As per Double Accounting Systems only)

Unit - 2 : Finance : 30%

- (1) **Capitalisation**
(Meaning, Overcapitalisation and Undercapitalisation, Watered Capital, Earning theory, Cost theory).
- (2) **Portfolio Management (Only Theory)**
- (3) **Operating and Financial Leverage**
(Theory and Primary Level examples, Excluding models)

Note : Maximum 20 Marks for theoretical questions.

Suggested Readings :

- (1) Anthony R.N., & Reece J.S. Accounting Principles, Recharud Irudin Inc.
- (2) Gupta R.L. & Radhaswamy M. Financial Accounting
- Sultanchang & Sons.
- (3) Monga J.A. Ahuja Girish & Sehgal Ashok : Financial Accounting
- Mayur Pap.
- (4) Shukal M.C. Grewal S. & Gupta S.C. Advance Accounts S.Chand & Co.
- (5) Compendium of Statement and Standards of Accounting - ICAI
New Delhi.
- (6) Agarwal A.N. Agarwala K.N. Higher Science of Accountancy. Kitab Mahal.

Banking Paper-2

**Proposed by Sub. Committee of Banking Studies Board
Held on 18-01-08**

1. **Indian Banking System** : Various Components of Indian Banking System, Role of Banking Institutes in economic development, History of Indian Banking.
2. **Commercial Banks in India** : Rise, growth, workings, Types, Importance, Services.
3. **Nationalisation of Commercial Banks in India** : Reasons and Effects, Achievements and limitations of Bank's Nationalisation, Challenges before Indian Commercial Banking.
4. **State Bank of India** : Rise, Nationalisation, Working Progress and Future, Merger of State Bank of Saurashtra.
5. **Co-Operative Banking in India** : Rise, Growth, Types, Importance, Achievements and Limitations, Recent Trends of Co-Operative Banking.

6. **Indian Development Banking** : Meaning, Characteristics, Types, Importance, Introduction of Development Banking Institutes : Industrial Development Bank of India, Industrial Finance Corporation of India, State Finance Corporations, Industrial Credit and Investment Corporation of India, Unit Trust of India, Small Scale Industries Development Bank of India, Gujarat State Finance Corporation (G.S.F.C.)
7. **Regional Rural Banks** : Meaning and Explanation, Rise and Growth, Importance, Management, Workings, Development, Evaluation, Contribution in rural growth.
8. **Reserve Bank of India** : Rise, Management, Traditional and Development oriented functions, Role of R.B.I. in economic development of India.
9. **Reserve Bank of India** : (A) Monetary Policy - Meaning, Importance, Objective, Recent Monetary Policy (B) Instruments of credit control - Utility, Comments.
10. **Indian Currency System** : Meaning of currency, Importance Supply of money, Factors influencing place of Rupee in International currency.
11. **Indian Money Market** : Characteristics, Limitations Unorganised Money Market.
12. **NABARD** : Rise, Functions, growth, Role in agriculture and Rural Development.
13. **Lead Banks** : Rise and Explanation, Progress and Limitations.
14. **Mutual Funds** : Meaning, Explanation, Development, Systems, Limitations, Types.
15. **Recent Trends of Indian Banking System** : (1) Privatisation (2) Technological growth (3) Modern Services (4) Non-Performing Assets (5) Marketing of Banking Service (6) Banking Industry future Developments (7) Merger Activities of Various Banks (8) Comparative Study of Credit - Deposit Ratio of Various Commercial Banks.

Banking Paper-3

Section : (1) International Banking Marks) (60

1. **Banking System of Japan** : Various Components of Japanese Banking System, Commercial Banking Services, Development Banking Institutes, the role of Bank of Japan in the economic development of Japan.
2. **American Banking System** : Various components, Commercial Banking Services, Development banking institute, Federal Deposit Insurance Corporation (FDIC)
3. **British Banking System** : Bank of England, rise, growth, nationalization, progress and limitations.
4. **International Finance Institutes** : World Bank, International Monetary Fund, International Finance Coporation, Asian Development Bank, World Trade Organization (W.T.O.)
5. **International Banking** : Euro Currency System, the role of Foreign Banks in India economy.

Section : (2) ESSAY (40 Marks)

- N.B.** :(1) Six essays to be asked from following in a question paper.
- (2) Question-4 : three essays to be asked and one essay should be written.
 - (3) Question-5 : three essays to be asked and one essay should be written.
 - (4) Eash essay carry 20 marks :

- (1) Merchant Banking Service in India (2) Narsimham Committee's Recommendations (3) Indian Money Market (4) Lease Finance in india (5) Marketing of Banking Services (6) Modern Banking Services (7) Non-banking Finance Companies of India (8) Nationalization of Indian Commercial Banks (9) Export-Import Bank of India (10) Reserve Bank of India (11) Mutual Fund of India (12) Postal Banking of India (13) Agricultural Finance of India (14) Industrial Finance of India.

Advance Statistics Paper-2

1. Multiple Correlation & Partial Correlation

Concepts of Multiple & Partial Correlation for three variables only. Yule's Notations, properties of Residuals, Variance of Residual with proof. Equation of plan of Regression for three variables with proof. Co-efficient of Multiple and Partial Correlation with proof and also their properties. Typical Examples.

2. Control Charts

Meaning of Statistical Quality Control (S.Q.C.) Causes of variation in quality. Construction of control charts. Limits of control charts without proof. Theory of Runs, Specified and Revised limits. Control Charts for variable : X-chart, R-chart, Control Charts for attributes. P-chart, np-Chart, np-chart and C-chart. Limits and advantages of S.Q.C. Typical Examples.

3. Acceptance Sampling

Sampling, Inspection, Discussion of the certain terms (i) Producer's risk and Consumer's risk (ii) A.Q.L. and L.T.P.D. (iii) A.O.Q. and A.O.Q.L. (iv) A.S.N., A.T.N. (v) O.C.Curve. Procedure of single Sampling Plan (S.S.P.) O.C., A.S.N., A.T.I. and A.O.Q. Curves for single sampling plan. Advantages of S.S.P. Typical Examples.

4. Interpolation and Extrapolation

Meaning, Assumptions and uses of Interpolation. Definitions of Various operators Likewise Δ , t , E and μ , Relationship Between operators. Factorial Notations, Fundamental theorem of finite Difference without proof. Without proof, Methods of Interpolation (i) Newton's Method (ii) Binomial Expansion Method (iii) Newton's Divided Difference Method (iv) Lagrange's Method. Typical Examples.

5. Linear Programming (L.P.)

Meaning and uses of L.P., Various terms which are used in L.P. important Definitions. Mathematical Formulation of the L.P. Assumptions and Limitations of L.P. Slack and Surplus variables. Optimum solution of L.P. by (i) Graphical Method (ii) simplex Method (for two & three variables only). Transformation of a given problem into dual problem and its optimum solution. Typical Examples.

Advance Statistics Paper-3

1. Demand & Supply Analysis

Laws of demand and supply, Mathematical formulation of demand, supply and cost. Price elasticity of demand and supply. Significance of elasticity of demand. Relationship between A.R.M.R. and price elasticity of demand elasticity of cost function. Market equilibrium, Monopoly Duopoly, Examples based on maximum profit. Typical Examples.

2. Production Function & Utility Function

Concept of Production and Utility, Production functions, Homogeneous function and Euler's Theorem with proof. Marginal Production.

3. Business Forecasting

Importance of Business Forecasting in planning. Forecasting for long, medium and short period. Methods of forecasting (1) Method of least squares (a) $y=a+bx$ (b) $y=a+bx+x^2$ (c) $y=abx$ (2) Input-Output analysis (two or three industries) (3) Exponential smoothing method, Typical Examples.

4. Testing of Hypothesis

Various terms which are used in the study of testing of hypothesis. One tailed and two tailed tests. Type-1 and Type-2 errors. Application of t-test, Large Sample tests, Interval Estimation. Typical Examples.

5. X² and F-test

Definition of chi-square variate and F variate. Chi-square test of variance of a normal population, goodness of fit of the theoretical poisson, Binomial, Normal distributions, Independence of attributes, Application of Z-test, test of Equality of two or more than two population means. Analysis of variance (ANOVA) for one way and two way classifications with one observation per cell., ANOVA of Latin square design. Only examples. Typical Examples.

Computer Science Paper-2

**(Database Management System using FoxPro)
FoxPro - THEORY (UNIT I to X)**

UNIT - 1 : Database Management

Concept of DBMS, types of files (command, database, report, label, index), creating, modifying, executing of command file using commands (create, modify, do), different data types (numeric, character, logical, date, memo, float, general), different operators (arithmetic, relational, logical), different scope options (all, next, rest, record)

UNIT - 2 : Creating, editing, updating database file using following commands :

Create, use [index], append [blank, from],
Edit [fields, for, while, when],
Delete [all, next, record, for, while] Zap, replace, pack
Recall [all, next, record, for, while]
Browse [fields, freeze, for, when, lock]
Insert [before, blank]
Close [all, databases, indexes]
Go [record, top, bottom]
List [off, fields, next, for, while, to printer, to file]
Display [fields, for, while, off, to printer]
Locate [for, while], continue [for, while], skip
Sum [for, while], average [for, while]

UNIT - 3 : Sorting, Indexing & multiple file Handling commands :

Sort
Index
Reindex
Find
Seek

UNIT - 4 : Input/output, initializing, assigning and other commands :

?, ??, ???*, &&, note =
Accept, input, store, private, public
Wait, @ say...get [picture, range, valid, default, when]
Read, say, clear, &&, exit, loop, @...to, @...box
@...fill, @...prompt with message
Concept of bar, menu, popup, window, pad
Array declaration using dimension (one dimension and two dimension)

UNIT - 5 : Looping commands (with nesting) :

For...endfor, do while...enddo,
Scan [for, while]...endscan

UNIT - 6 : Conditional and branching commands :

If...else...endif (also nesting)
do case...endcase

UNIT - 7 : Procedure commands :

Creation of procedures, procedure, parameter, return, suspend, resume, cancel, execution of procedures (do[with])

UNIT - 8 : Library functions :

Character, string and other functions :
chr(), asc(), val(), left(), right(), str(), subsrt(), len(), lower(), upper(), ltrim(), rtrim(), alltrim(), stuff(), isupper(), islower(), isalpha(), isdigit(), soundex(), parameter(), proper().

Numeric functions :

abs(), between(), ceiling(), floor(), int(), min(), max(),
mod(), round(), sqrt(), rand(), sign(), inlist().

Date and Time functions :

date(), time(), day(), dow(), month(), year(), dtoc(), ctod(),
cdow(), cmonth().

File and record functions :

recno(), reccount(), bof(), eof(), found(), deleted().

UNIT - 9 Set commands :

alternate, carry, confirm, color to, console, date, default,
decimal, device, delimiters, exact, filter, fixed, functions,
index, order, print, relation, safety, status, talk, message,
mark.

UNIT - 10 Practicals

Programming exercise based on unit 1 to 10

Computer Science Paper-3

**(Business Application Development in Visual Basic)
Programming in Visual Basic - THEORY (UNIT 1 to 11)**

UNIT - 1 :

Visual Basic project, Visual Basic programming environ-
ment and naming objects.

UNIT - 2 : Working with Controls :

Text Box, List Box, Combo Box, Option Button, Check
Box, Frame, Timer, Scroll Bars, Label, Form, Drive List
Box, Directory List Box, File List Box, Picture, Image,
Shape.

Properties for Relevant Controls :

Name, Appearance, Alignment, Autosize, Backcolor, Backstyle, Borderstyle, Caption, Cancel, Default, Enable, Font, Height, Width, Top, Left, Locked, Min, Value, MaxButton, MinButton, Max, MaxLength, Multiselect, Multiline, PasswordCharacter, Interval, Style, Tabindex, Tabstop, Visible, Wordwrap, Windowstate, SelLength, SelStart, SelText, Picture, DownPicture, DisablePicture, List, ListCount, ListIndex, Text, Image, Icon, ForeColor, Index, Sorted, Print

Events for Relevant Controls :

Click, Change, DbClick, Keydown, KeyUp, KeyPress, MouseDown, MouseUp, MouseMove, Load, Gotfocus, Lostfocus, Activate, Timer, Scroll, Initialize, Paint, Activate, Resize, Unload, Deactivate

Methods for Relevant Controls :

Show, Hide, Zorder, AddItem, RemoveItem, Clear, SetFocus, Move.

UNIT - 3 : Working with Data :

Variables, Data Types, Declaring Variables, Scope of Variables, Constants, Arithmetic operations on Data, Displaying Output

UNIT - 4 : Selection

What is Selection ? Type of selection, testing multiple conditions, nested IF structures, Complex multiple operations on Data, Displaying Output

UNIT - 5 : Loops :

What is a Loop ? Type of Loops - FOR... NEXT, DO WHILE... LOOP, DO... LOOP UNTIL

UNIT - 6 : Handling Strings, Dates and Time :

Introduction, Declaring Strings, ASCII, Processing Strings, Handling Dates, Formatting Date output, Handling Time, Calculations with Time and Date.

UNIT - 7 : Procedures

What is a Procedure ? Types of Procedures, Why use Procedures ? Passing Parameters, Practical work on using the correct formal parameters, Functions, Form and Standard Modules.

UNIT - 8 : Arrays

What is an Array ? How to declare an Array ? Static and dynamic arrays, Processing an Array, Passing Arrays to Procedures, Two Dimensional Arrays, Control Arrays.

UNIT - 9 : Files

What is Files ? Types of Files (concept), Basic file operations like read, write, append (Sequential file only).

UNIT -10 : Menus

Introduction, Type of Menus, Features of menu

UNIT -11 : PRACTICALS

Programming exercise based on Units 1 to 11

Passing Standard :

Minimum 25 marks in Theory and Minimum 11 marks in Practical.

Exemption :

Minimum 44 marks in (Theory+Practical)