

## B. Com (Computer Application) II

### Semester- IV Examination

Sr. No.	Subjects	Course Scheme			No. of Credits	Examination Scheme					
		L	T	P		Maximum Marks				Minimum Passing Marks	
						ESE	P		IA	Total	Total
						E	I				
1.	STATISTICAL TECHNIQUES AND BUSINESS MATHEMATICS-II	4	--	--	2	80	--	--	20	100	35
2.	MANAGEMENT ACCOUNTING	4	--	--	3	80	--	--	20	100	35
3.	STRUCTURED PROGRAMMING IN 'C'	4	--	--	3	80	--	--	20	100	35
4.	DATABASE PROGRAMMING WITH ORACLE	4	--	--	3	80	--	--	20	100	35
5.	FRONT END DEVELOPMENT WITH VB	4	--	--	3	80	--	--	20	100	35
6.	E-COMMERCE AND XML	4	--	--	3	80	--	--	20	100	35
7.	PRACTICAL-I BASED ON THEORY PAPER 3 AND 4	--	--	4	2	--	25	25	--	50	E=9 I=9 18
8.	PRACTICAL-II BASED ON THEORY PAPER 5 AND 6	--	--	4	2	--	25	25	--	50	E=9 I=9 18

- Note :

- L- Lecture, T- Tutorial, P- Practical, IA- Internal Assessment, ESE-End Semester Examination, E-External Examiner Marks, I-Internal Examiner Marks

- Practical Period for the subject Information Technology-04 Periods per week/per batch of 30 students.

**B.COM. (COMPUTER APPLICATION) PART TWO  
SEMESTER-IV**

**Paper –I : STATISTICS TECHNIQUE AND BUSINESS**

**MATHEMATICS -II**

**Theory: 80 Marks**

**Internal Assessment:20 Marks**

**Objectives-** To Provide Basic Knowledge and Understanding of important Statistical Technique.

**Periods Allotment**

<b>UNIT I</b>	<b>16</b>
<b>Regression Analysis</b>	
Simple Problems on Regression, Mean and Standard Deviation Method, Equation Method (Including One Equation)	
<b>UNIT II</b>	<b>12</b>
<b>Index Number-</b> Laspeyre's Method, Paasche's Method, Dorbish and Bowley Method and Fisher Ideal Method	
<b>UNIT III</b>	<b>16</b>
<b>Chi-Square Test-</b>	
<b>UNIT IV</b>	<b>16</b>
<b>Business Mathematics-</b> Ratio and Proportion, Simple Interest, Compound Interest	

**BOOKS RECOMMENDED**

1. Statistics- R. S. N. Pillia and V. Bhagavathi, S. Chand and Company
2. Basic of Computer and Statistical Techniques – Dr. Rahul Sawlikar and Dr. S. B. Kishor, Das Ganu Prakashan, Nagpur – ISBN –978-81-921757-8-2
3. Fundamental of Statistics- Elhancs D.N.
4. Statistical Analysis- Dr.Rahul Sawlikar, Payal Prakashan, Nagpur-ISBN-978-81-922554-3-9
5. Fundamental of Mathematical Statistics – Gupta and Kapoor, Sultan Chand and Sons Publication ISBN- 8180540049
6. Statistical Methods- S.P.Gupta, S.Chand and Company, New Delhi
7. Statistics, Theory, Method and Application- Sancheti and Kapoor.
8. Fundamental of Statistics – A. K. Agrawal and Sahib Singh, PHI 4<sup>TH</sup> Edition.

**PAPER-PATTERN OF  
B. COM. (COMPUTER APPLICATION) PART TWO  
SEMESTER IV  
STATISTICSTECHNIQUE AND BUSINESS MATHEMATICS-II**

**Time = 3.00 Hours**

**Marks =80**

Que. No. 1 on Unit 1 <sup>st</sup>		
a) Theory		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que. No. 2 on Unit 2 <sup>nd</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que. No. 3 on Unit 3 <sup>rd</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que. No. 4 on Unit 4 <sup>th</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(8M)
d) Problem		(8M)
Que No. 5 Write Short Answers		
a) Theory on Unit 1 <sup>st</sup>		(4M)
b) Theory on Unit 2 <sup>nd</sup>		(4M)
c) Theory on Unit 3 <sup>rd</sup>		(4M)
d) Theory on Unit 4 <sup>th</sup>		(4M)

## **B.COM. (COMPUTER APPLICATION) PART TWO**

### **SEMESTER-IV**

#### **Paper II : MANAGEMENT ACCOUNTING**

**Theory: 80 Marks Internal Assessment: 20 Marks Objectives-** To Provide Basic Knowledge and Understanding of important Management

Accounting to Business and Industry

#### **Periods Allotment**

<b>UNIT I</b>	<b>15</b>
Meaning, Object, Nature, Advantages, Limitations of Management Accounting, Tools and Techniques of Management Accounting, Distinguish between Cost, Management and Financial Accounting. <b>Business Budgeting-</b> Meaning, Types of Budget, Flexible Budget and Problems related to Flexible Budget, Cash Budget.	
<b>UNIT II</b>	<b>15</b>
<b>Break Even Analysis</b> – Meaning, Need, Importance and Limitation, Computation of Profit-Volume Ratio, Break –Even-Point, Fixed Cost, Margin of Safety, Contribution, Estimated Sales for required Profit and Estimated Profit for given Sales, Changes in Sales, Variable Cost and Fixed Cost.	
<b>UNIT III</b>	<b>15</b>
<b>Ratio Analysis-</b> Meaning, Nature, Significance and Limitation of Ratio Analysis. Preparation of Income and Expenditure Statement, Computation of Ratios relating to Trading and Profit and Loss Account and Balance-Sheet Ratios such as Current Ratio, Liquid Ratio, Stock to Working Capital Ratio, Debtor Turnover Ratio, Creditor Turnover Ratio, Fixed Assets Turnover Ratio.	
<b>UNIT IV</b>	<b>15</b>
<b>Fund Flow Statement-</b> Meaning, Concepts, Importance and Limitation, Preparation of Schedule of Changes in Working Capital and Fund Flow Statement.	

## **BOOKS RECOMMENDED**

1. Management Accounting – R. S. N. Pillia and V. Bhagavati, S. Chand and Company, New Delhi
2. Cost and Management Accounting - Dr. Rahul Sawlikar, Dr. K.B. Moharir and Dr. Pradip Ghorpade, Rajani Prakashan, Nagpur ISBN-978-93-82683-00-1
3. Cost and Management Accounting- Y.R.Mahajan, Pimplapure Prakashan, Nagpur
4. Management Accounting- Dr. R.K.Sawlikar and Dr. R.P.Ingole, Das Ganu Prakashan, Nagpur. ISBN-978-93-81660-41-6
5. Cost and Management Accounting(Marathi) Dr.Kishor Moharir, Sunita Moharir, Dr. Pradip Ghorpade, Dr. Vinod Waghale, Das Ganu Prakashan, Nagpur
6. Cost and Management Accounting(Marathi)- Dr.Sudhir Bobhankar, Dr. Megha Kanetkar, Shri.Sainath Prakashan, Nagpur
7. Cost and Management Accounting- Shashi K.Gupta, Kalyani Publisher, New Delhi
8. Management Accounting-Dr.K.L.Gupta, Sahitya Bhawan Publication, Agra
9. Essential of Management Accounting- P.N.Reddy and H.R.Appannaiah, Himalaya Publishing House, New Delhi.

**PAPER-PATTERN OF  
B. COM. (COMPUTER APPLICATION) PART TWO  
SEMESTER IV  
MANAGEMENT ACCOUNTING**

**Time = 3.00 Hours**

**Marks =80**

Que No. 1 on Unit 1 <sup>st</sup>		
a) Theory		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que No. 2 on Unit 2 <sup>nd</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que No. 3 on Unit 3 <sup>rd</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que No. 4 on Unit 4 <sup>th</sup>		
a) Problem		(8M)
b) Problem		(8M)
	<b>(OR)</b>	
c) Problem		(16M)
Que No. 5 Write Short Answers		
a) Theory on Unit 1 <sup>st</sup>		(4M)
b) Theory on Unit 2 <sup>nd</sup>		(4M)
c) Theory on Unit 3 <sup>rd</sup>		(4M)
d) Theory on Unit 4 <sup>th</sup>		(4M)

## B.Com. (C.A.) - II

### SEMESTER –IV

#### Paper III : STRUCTURED PROGRAMMING IN C

(Marks-80)

##### UNIT–I: Basic Elements of ‘C’ Programming

**Introduction to C:** C-Character Set and Keyboards, Constants and Variables, Data types, Type Casting, **Operators and Expressions:** Arithmetic, Relational, Logical Assignment, Bitwise and Increment and Decrement Operator, Input and Output statements in C.

##### UNIT–II: Storage Class and Control Statement

**Storage Class:** auto, static, extern, static

**Conditional Statement:** if-else, nested if, else-if ladder, switch, Ternary Operator

**Looping Statement:** for loop, while and do-while loop, Comma Operator and Use of break, continue and goto statements.

##### UNIT–III: Arrays, Structure

**Arrays:** Definition, Types of Arrays, Initialization of Single and Two dimension array, Writing and Reading data from an array, Bounce Checking, Searching (Linear and binary), Sorting (bubble, insertion, selection) and Merging of two arrays,

**String:** String Manipulation using string library functions.

##### UNIT IV: Structure & Union

**Structure:** Need of Structure, Period Operator, Initializing Structure, sizeof(), Arrays of Structure, Nested Structures.

**Unions:** Concept and applications, enum

##### Books:

- 1) E.Balguruswami, “Programming in ANSIC”, TMH,2009,ISBN-978-0-07-064822-7/0-07-064822-0
- 2) RAJARAMAN, “COMPUTER PROGRAMMING IN C”, PHI, 2002, ISBN-81-203-0859-X

##### References:

- 1) Dr.S.B.Kishor, Dr.V.Godki, S.Madhavi,”Gateway to C Programming”, Lambert Pub.Germany,ISBN 9783845414744
- 2) K.R.VenugopalandS.R.Prasad,“MasteringC”,TMH,2008,ISBN-13:978-0-07-061667-7 / 10:0-07-06-1667-1.

**B.Com. (C.A.) - II**  
**SEMESTER – IV**  
**Paper IV : DATABASE PROGRAMMING WITH ORACLE**  
**(Marks-80)**

**UNIT – I: Introduction**

RDBMS Concept, Introduction to Oracle, SQL Tools, Oracle as Multi-User System, SQL, SQL \*Plus, Getting Started with SQL, Writing SQL Commands, Components of SQL, Data Types, Database Users, Database Objects, Elements of SQL

**UNIT – II: SQL Languages**

**Data Definition Language :** Creation of Table, Viewing table Structure, Data Integrity through Constraints, Altering Table, Dropping Table, Truncating Table

**Data Retrieval:** Select Command, SQL Operators, Text Search, Group Queries, Order By Clause

**DML Operation:** Insert, Update and Delete

**Transaction Control Language:** Commit, Rollback,

**SavePoint Data Control Language:** Grant, Revoke

**UNIT - III: SQL Function and Database Objects**

**SQL Functions:** Character Function, Case Manipulation, Numeric Functions, Date Function, Conversion Function, Conditional Functions, Nested Functions, Group Functions  
**Database Objects:** Views, Sequence, Synonym, Join, Set Operator and Subquery

**UNIT - IV: PL/SQL**

Basic Elements of Programming, Select..Into Statement, Exception Handling: Predefined Exception, When Other Exception, Cursor: Explicit Cursor, Explicit Cursor Attributes, Subprogram and Packages, Trigger

**Books :**

- 1) Oracle (SQL/ & PL/SQL Programming”, S.B. Kishor, Das Ganu, ISBN : 978-81-921757-5-1
- 2) Ivan Bayross, “ Oracle Developer 2000”, BPB, 2006, ISBN : 8/7029-899-7

**References :**

- 1) Paul Hipsley, “Developing Client / Server Applications with oracle Developer/2000 TM”, Techmedia, 1997, ISBN – 81-87150-02-X
- 2) Ivan Bayross, “ Commercial Application Development using Oracle Developer 2000 Forms 6i”, BPB, 2003, ISBN : 81-7656-742-6

## B.Com. (C.A.) - II

### SEMESTER - IV

#### Paper V : FRONT END DEVELOPMENT WITH VB

(Marks-80)

##### UNIT-I: Introduction to Visual Basic

**Introduction:** Integrated Development Environment (IDE) – Features, Event Driven Programming

**Visual Basic Control:** Form, Label, Textbox, Frame, Checkbox, Option Button, ListBox, ComboBox, Timer, Scrollbar, Picture, Image, File Controls, Artwork Control

##### UNIT-II: Programming Constructs and Array

**Programming Constructs:** Data Types, Variable, Constant, Operator, System Defined Function, Dialog Box and Creating User Interface

**Control flow statement:** If-Then, Select-Case, For-Next, While Wend, Do-Loop Statement. With..End With, DoEvent Statement

##### UNIT-III: Array and Procedure

**Array:** One Dimensional Array, Built-in Array Function, For. Each Loop, Arrays Types **Procedure:** Types of Procedure, Subroutine, Function, Module

**ActiveX Control:** Tab Strip, Status Bar, Slider, Month View, DTPicker, Rich Text Box, Common Dialog

##### UNIT-IV: Menus and Interface

**Menus:** Menu Editor, Creating Menus, Utility features provided by Menu Editor, Modifying Menu at Run Time, Pop-Up Menu, Creating Toolbar using Image List

**Interface:** SDI, MDI,

##### .Books:

- 1) Evangelos Petroustos ,”Mastering Visual Basic 6 “, BPB, 2005 ISBN-81-7635-269-1.
- 2) Dr. S.B. Kishor, “Front End Development”, Das Ganu Prakashan.
- 3) MoelJerke, ”Complete Reference Visual Basic 6”,TMH, 2004, ISBN -0-07-463666-9.
- 4)Steve Brown,”Visual Basic 6.0 Complete”, Complete Idiot’s Books, ISBN 978-0789718129

##### References:

- 1) Peter Norton’s ,”Visual Basic 6.0” ,SAMS tec-Media,2006,ISBN-81-7635-150-4
- 2) Michael Halvorson, “ Learn Visual Basic 6.0 Now”,PHI, ISBN 0-7356-0729-X
- 3) Michael Vine ,”Visual Basic Programming – For Absolute Beginner”, PHI, ISBN: 0761535535
- 4) Paul Sheriff ,”Teaches Visual Basic 6”,PHI978-8120315624

**B.Com. (C.A.) - II**  
**SEMESTER – IV**  
**Paper VI : E-COMMERCE AND XML**

**(Marks-80)**

**UNIT-I: E-COMMERCE AND INTRODUCTION TO INTERNET**

**Introduction to E-commerce:** Definition, Advantages and Disadvantages, Difference Between Traditional E-commerce and E-commerce, E-commerce Services, Online Payment Services, Portals, Features of Portals, Business opportunities in E-commerce, Business use of Internet, Three pillars of Electronic Commerce, Internet Architecture, E-commerce and its Trade cycle, Characteristics of Reliable Information System, Major Segments of E-commerce.

**Introduction to Internet:** Internet, Basic Internet Terms, Evolution of Internet, Internet Addressing, Protocols, Internet Protocols, Services of Internet, Search Engine.

**UNIT-II: ELECTRONIC DATA INTERCHANGE [EDI]**

**Introduction to EDI:** Features of EDI, Advantages and Disadvantages, Benefits of EDI, EDI Trade Cycle, Value Added Service, E-commerce Technology Choices.

**Introduction to Electronic Market:** Three models of Electronic Market, Advantages and Disadvantages of E-market, Usage of E-market, Benefits of E-marketing, Categories of E-commerce, Electronic Market place Technology, Traditional marketing Strategy, Markets Category, Future of Electronic market, Internet Commerce, Internet Commerce and Trade Cycle.

**UNIT-III: INTERNET SECURITY**

Introduction, Secure Transaction, Privacy Issue, Computer Crime, Types of Computer Crime.

**Introduction to Security Issue:** Damage to Data and loss of Data, Unauthorized Use of Data, Environmental Threats, Human Threats.

**Introduction to Security Procedure:** Firewall, Cryptography, Password, Access Control List, Digital Certificate.

**UNIT-IV: CSS and XML**

**CSS:** Defining style sheets features, adding style to document, Unlink to a single sheet. Embedding style sheet, Using inline style and its properties,

**XML:** Introduction. XML and SGML, Design goals of XML, Application of XML; XML Software, XML tags, Structure of XML documents, Element markup, Attribute markup,

**Namespaces:** Qualified name and unqualified names, Namespace scope, default name space, working with formatting

**Working with DTD:** Introduction, HTML and DTD, Benefits of the DTD, Structure of DTD, and Declarations of variable in DTD Element name, Occurrence indicators, Connectors.

**Books:**

- 1) Greenstein and Feinman, "Electronic Commerce", TMH, 2000, TMH, ISBN-0-07-042141-2,.
- 2) C.Xavier, "Web Technology and Design", TMH, ISBN-978-81-224-1450-9

**References:**

- 1) Complete HTML, BPB, 2010, ISBN-978-0-07-070194-6.
- 2) Bhushan Dewan, "E-Commerce by", S.Chand, ISBN -81-219-2083-3

## B.Com. (C.A.) - II

### SEMESTER –IV

#### PRACTICAL -I: STRUCTURED PROGRAMMING IN C

- 1) A program to find simple and compound interest for the rate of interest.
- 2) A program to find corresponding temperature in Fahrenheit from a given temperature in Celsius.
- 3) A Program to accept decimal number and display equivalent number in Octal and Hexadecimal.
- 4) A program to swap the contents of two variables.
- 5) Program to accept the distance between two cities in Kilometer and print the distance in meter, feet, inches and centimeter.
- 6) Program to accept the two sides and angle included by these two sides to find area and third side of a Triangle.
- 7) To check a number is even or odd.
- 8) A program for testing leap year.
- 9) A program to find largest among any five number with minimum condition.
- 10) A program to find roots of Quadratic equation  $ax^2+bx+c$ .
- 11) Consider the example where we want to print all the prime number between 10 to 100.
- 12) Program to print multiplication Table of a number.
- 13) A program to print number, square and cube of the first 10 natural number.
- 14) A program to find the factorial of a integer number.
- 15) A program to generate and print Fibonacci sequences .
- 16) A program to print first 5 lines of the following pyramid.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

- 18) A program to print first n lines of the following Pyramid.

```
1
  2  2
 3  3  3
4  4  4  4
5  5  5  5  5
```

- 19) A program to find the GCD of two Positive integers by successive division.
- 20) A Program to find the number of Armstrong number between 123 to 425.
- 21) A program to print truth table from  $X* Y+Z$ .

22) A Program to generate a menu driven program using switch statement.

- 1) Add
- 2) Edit.
- 3) Delete.
- 4) Exit.

23) A Program to find sum of two matrices having size m\*n and p\*q.

24) A Program to Transport the matrix of size M\*N.

25) A Program to delete an element from list of N number.

26) A Program to find sum of each row and column of matrix and also find largest and smallest element in the given matrix.

27) A program to count number of characters including uppercase and lowercase letter, digits, punctuations, space and words that are entered in a given string.

28) A Program to enter the marks of 5 subjects of 3 students and also find the total marks of each student using structure with array.

29) A Program to accept the containing 10 number and pass it to function to print it.

30) A program to evaluation following series.

$$e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \frac{x^4}{4!} + \dots + \frac{x^n}{n!}$$

31) A program to define and accept the element of structure

- 1) Empno.
- 2) Name
- 3) Basic pay and display the same structure along with DA, CCA and gross salary.

DA and CCA are calculated as follows.

DA= 91% of basic salary CCA=  
RS 100/- consolidation.

## Practical -I: On based Database Programming with Oracle

- 1) Create table DONAR with following fields (Dno, Dname, City, Age, Sex, BG, Quantity, date).
- 2) Insert the following records into the table DONAR.

Dno	Dname	City	Age	Sex	BG	Quantity	Date
101	RAJESH RAO	CHANDRAPUR	28	M	O+ve	100	25-AUG-11
102	ANAND SHARMA	NAGPUR	20	M	O+ve	200	26-AUG-11
103	VISHAL DESHPANDE	HYDERABAD	23	M	O-ve	250	26-AUG-11
104	SHRUTI RAKHUNDE	CHANDRAPUR	22	F	A+ve	100	27-AUG-11
105	ANUSHREE DHAKATE	-	22	F	A-ve	200	26-AUG-11
106	VIJETA DHAKATE	BALLARPUR	22	F	O+ve	100	25-AUG-11
107	AAMIR TAJA	CHANDRAPUR	21	M	O+ve	250	27-AUG-11
108	AMIR KHAN	DURGAPUR	25	M	O+ve	100	25-AUG-11

3) Perform following queries on above table.

1. Find all donars whose name starts between alphabets 'A' to 'S'.
2. Find all donars who belongs to city CHANDRAPUR.
3. Find all donars who does not belongs to CHANDRAPUR city.
4. Find all donars who belongs to either CHANDRAPUR or NAGPUR city.
5. Find all donars whose city value contains NULL.
6. Arrange all donars in the sorted order whose age is between 18 and 22.
7. Find all male donars.
8. Find all male donars having O+Ve blood group.
9. Find all donars who donated the blood between 25-AUG-10 and 26-AUG-11.
10. Find all donars who donated more than 100 ml of blood.

11. Find all female donars who belong to city CHANDRAPUR having blood group 'O+Ve' in the sorted order of city?
12. Display all donars according their age.
13. Display the donar list in recent order of donation date.
14. Display all distinct blood group type.
15. Update the age of all donars by 1.
16. Mr. RAJESH RAO changed his name as RAMESH RAO and he is shifted to DURGAPUR. Note the above changes in the table.
17. Due to certain reason all the donars who donated the blood on date '26-AUG-11' are rejected. Hence delete their information.
18. Find the donars names whose first name starts with letter 'A' and ends with 'D' irrespective of case letter.
19. Find the donar names whose last name starts between alphabets 'D' to 'S' (Ex. DESPANDE, SHARMA)
20. Find total number of donars having O+Ve group.
21. Find total quantity of blood of group A+Ve.
22. Average age of female donar of O+Ve group by rounding the age to next digit.
23. Display all donars who name pronounces like 'AAMIR';
24. Find the donars who donated the blood in the month of AUG.
25. Find the donars who donated the blood on 15<sup>th</sup> Aug. of year.

4) Perform following queries on table donar (Functions)

- Find the donar names whose first name starts with letter 'A' and ends with 'D' irrespective of case letter.  
(Ex. ANAND) Hint: Use SUBSTR and INSTR function to extract first name.
- Find the donar names whose last name starts between alphabet 'D' to 'S'  
(Ex. DESHPANDE, SHARMA)

Hint: Use SUBSTR and INSTR function to extract first name.

- Find total number of donars having O+ve group.
- Find total quantity of blood of group A+ve.
- Average age of female donar of O+ve group by rounding the age to next digit.

Hint: use Ceil function to round the age to next digit.

- Display all donars who name pronounces like 'AAMIR';
- Find the donars who donated the blood in the month of AUG.
- Find the donars who donated the blood on 15<sup>th</sup> Aug. of year.
- Display all donar names in lowercase.
- Find donars whose first name is five characters long.
- Find every 3<sup>rd</sup> donar in the list. Donar numbers are assigned as consecutive no.  
Hint: ..... where  $\text{mod}(\text{dno}, 3) = 0$

**Practical- II: Based on**  
**a) Front End Development with VB**

1. Design a form to accept First, Middle and Last Name and display the full name (Concatenate three text box) on Label when user click on Command Button.
2. Design an application that gives five choices of colors. Design an application to choose any one color using option button and change the ForeColor of TextBox.
3. Write an application to add and remove the name of city from combo box
4. Design a VB screen, to display current time in digital format continuously after every one second and change the background color of form.
5. Build the application, which marquee the caption of Form
6. Build the application, to convert the Fahrenheit temperature selected through scrollbar value into corresponding temperature is Celsius.
7. Build a application that collects marks for five different subjects. Calculate total, If total is  $\geq 500$  display message” You are allowed” otherwise display “You are not allowed.”
8. A book stall gives discount on the books as per the following conditions,

No. of Books Purchased	Discount
$\leq 5$	Nil
$> 5$ and $\leq 10$	10%
$> 10$ and $\leq 15$	12%
$> 15$	20%

Create a form as follows to calculate the Discount

9. Build the VB application that converts a number entered into the Textbox to Octal, Hexadecimal and Decimal.
10. Build the application, to accept the password within time limit say 8 second otherwise display a message time elapsed.
11. Build the application using timer for personal appointment remainder while working with computer system.
12. Evaluate following  $\sin(x)$  series
  - i.  $\sin(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} - \dots$
13. Build the application, to change the color of Frame using RGB function from the values that are set by 3 Scroll bars.

14. Build a Calculator application to perform basic arithmetic operation
15. Build the application, to accept the temperature of Number of days passed in the current month and determines the highest and average temperature.
16. Demonstrate the working of data bound controls
17. Create a data bound control application to perform various data operation using DAO Control. Assume Database Name and Table Name is Donor having 4 fields Donor\_Number, Donor\_Name, Date\_of\_Birth, Donor\_Blood and Sex.
18. Create a data bound control application to perform various data operation using ADO Control. Assume Database Name and Table Name is Donor having 4 fields Donor\_Number, Donor\_Name, Date\_of\_Birth, Donor\_Blood and Sex.
19. Write an application to divide the number by another and it must be able to handle any error that may arise during run time.

### **b) E-COMMERCE AND XML**

1. Write a program to illustrate the simple XML Document.
2. Write a program to show the use of CDATA Section.
3. Write a program to declare the elements in DTD.
4. Write a program to show XML File with an Internal DTD.
5. Write a program to show XML File with an External DTD.
6. Write a program to show XML Document Attached to an External DTD.
7. Write a program to Create XSL Sheet for an XML Document.
8. Write a program to demonstrate the use of XSL Sheet in an XML Document.
9. Write a program to Create web page using XML.