Marks :75	(CLASS-XII) PART-II	Time: 2:30 Hours

Theory: 75 + Practical : 25 Total:100

Topics	Weightage % age
Database Basics Introduction to Database Concepts, Database concepts, Terminology and Usage. Database Design and Table Creation, Formatting a Table, Relationships, Locating and Replacing information, Creating Simple Queries, Creating Calculated Fields. Introducing Forms, Formatting and Creating Forms, Formatting and Creating Reports	40
Programming using C **OR** **Programming using VISUAL BASIC** **Option I: Outline for C** Characteristics of High Level Porgramming Languages, Basic Structure of Program. Creating, Editing and Saving a Source Program, Compiling, Linking and Executing A Program, Variables: character, integer, long integer, floating point, double precision, Input/Output, printf, scanf, format Specifier, Field Width Specifier. Operators: Arithmetic, Relational, Logical Operators, Comments, Loops: for loop, while loop, do-while, Decision: if Statement, if-else Statement, else-if, switch Statement, Conditional Operator, Importance of Functions, Simple Functions, Function Passing Arguments and Returning Values, Open File, Read, Write, Append and Close File ***OR*** **Option II: Outline for Visual Basic** I/O Statements, Control Statements, Working with Forms Variables and Arrays, Functions and Procedures, Basic ActiveX Controls, Drawing with Visual Basic, Advanced ActiveX Controls, Database Programming with Visual Basic, The Active Data Objects, Scripting Objects, Visual Basic and the Web	**60**

LIST OF PRACTICALS FOR CLASS-XI (PART – I)

1. How can we use start menu in windows?
2. How can we manage file and folders in windows?
3. How can we customize the windows desktop?
4. How we search files and folders within windows?
5. How to open the help and support center?
6. Windows Accessories.
7. How to Open and Save Files in Specified Path or New Folders
8. How Printer Works.
9. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Start MS Word using start menu and type “My first Lecture”
Save the document in My Documents folder against your Roll no.
Rename the document as “First”.
Close the document.
Delete the document.
Close MS Word.
10. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Type two paragraphs.
Move the start of current line and then move to the end of that line.
Move the start of document and then move to the end of that document.
Select word, line. Paragraph and different amount of text in the document.
11. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Copy that last line of first paragraph to the end of second paragraph.
Interchange both the paragraphs such that first paragraph is after second paragraph.
Delete the last three lines of second paragraph.
Undo the last action and then redo it.
Copy the paragraphs in a new document. Also delete the paragraphs from old document.

12. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Correct the spelling and grammar of first line using shortcut menu.
Correct the spelling and grammar of second- and third-line using book icon on status bar.
Check the spelling & grammar remaining line using spelling and grammar dialog box.
Turn off Automatic Spell & Grammar checking.
Create an Autocorrect entry to replace for with from.
Delete any Autocorrect entry.
Find the synonyms of matter.

13. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Change font style to times new roman with font size 15.
Set the character spacing of paragraph to 1 point.
Apply Bold. Underline and italic to the word “web server”.
Change the color of text to dark blue and highlight it.
Remove highlighting.

14. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Convert the given paragraph into italic text.
Underline the text in blue colored dotted style.
Change the color of text to blue gray.
Apply font effects “emboss” to first line and “outline” to second line of the paragraph.
Change the line spacing to double.

15. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
H_2O 10^oC $10^4 \pm 10^2$ C*

16. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Use TOGGLE CASE for first sentence and lower case for second sentence.
Set the line spacing of the paragraph to 1.5.
Justify the paragraph.
Type the heading of paragraph “High Level Languages”. Apply bold, underline and center align on heading.
Apply text effect “Sparkle text” to the heading.
Apply first line indent.

17. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Open the file.
One the Tools menu, click options, and then lick security.
Do one of the following:
In the password to open box, type a password, and then click OK.
In the Recent password to open box, type the password again and then click OK.

18. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Computer
Software
MS-Windows 2000
MS-Office
MS-Word
MS-Excel
MS-Power Point
MS-Front Page

19. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Adding a new row to the end of the table.
Insert a new column Region between the Salesperson and Dolls columns:
Sort the table data by region and within Region by Salesperson in ascending order:
Type Total at the bottom of Salesperson Column and sum Dolls, Trucks and Puzzles columns.
Delete Trucks column and Yasin row.
Recalculate total for Dolls and Puzzles.

20. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Make a table of Class Study Schedule

21. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Prepare the document of detailed mark sheet
Insert a new column before the remark’s column with heading as percentage.

Give the serial Numbers in Roman Numbers.
Change the column heading to upper case.

22. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Insert a table of 6 rows and 6 columns with format "List 2". Add the following data in table.
Change the table's format to "Grid 7".
Insert a row and column in the table and then delete them.
Add table caption.

23. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Inset the table using toolbar. Center aligns the table and apply blue-gray grid border to it.

24. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Prepare the following table in the same format:
Calculate result in first three rows of last column using word formulas.
Insert new row at start of table having only one column and apply shadow of ¾ point to it.
Give center aligned bold 26pt heading 'Amount' to table in this new row.
Convert table to text in such a way that table format is not changed (looks like 'Table of Tabs').

25. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Prepare the document in the same format:
JAVA Certification, ORACLE Certification, Web Programming, Graphics Designing

26. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Prepare the document using "Classic4" table.

27. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Perform the following tasks with the document
Insert any picture from Clip ART

28. Perform the Following Tasks in MS-WORD and write the stepwise procedure.
Prepare the document Curriculum Vitae.

29. MS-Word Shortcut Keys, Viva Voce

30. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Select a cell.
Select a group of adjacent cells.
Select a group of non-adjacent cells.
Select a whole columns or whole rows.
Select entire sheet.

31. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Enter day's series from Monday to Saturday.
Enter number serial 10.15 up to 30.
Enter month's series from January to December.
Find 'Sunday' in the worksheet and replace it with "Sun".
Use Autocomplete to fill A13 cell with "September".
Enter current date in Cell C3 & current time in Cell C4.
Type "Excel" in cells range from D1to D10.

32. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Enter some data in the cell A4 to A10.
Copy the cell data from A4 to A10 in G4 to G10.
Move the dell data from G1 to G10 in D2 to D11.
Delete the contents of cells from D2 to D11.
Undo the last action and then redo it.
Insert column before column C and row before row 3.
Hide column C and then unhide it.
Hide row 3 and then unhide it.

33. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Create the worksheet to show the result of six students.
Make ROW 1 as bold and centralize it.
Change font size of Column 1 and Row 1 to 18 points.
Change the font of the numeric data to Arial black.
Change to background color of Row 1 and column 1 to Dark blue.

34. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Create the worksheet.

Enter the formula to calculate area of rectangle in cell C2 and Copy the formula form cells C3 to C6 by dragging the fill handle downwards.

35. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Creating the following worksheet Calculate the discount. It is 20% of price.
Calculate the Amount due for each item after discount.
Calculate the total amount of column 2, 3 and 4.

36. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet in the same format and save it as SQAURES.
Fill the remaining cells using formulas.
Format the worksheet up to 2 decimal places.

37. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet and save it against your Roll No
Rejected votes = Enlisted voters – Cast votes
Cast Rate = Cast vote / Enlisted votes * 100
Rejection Rage = (rejected Votes / Enlisted Voters) * 100
Insert a new row at the top of the worksheet. Give the worksheet heading as “Election Report Union Council Bhatti She ran”.
Insert a current date in Cell B8 and format the date value
dd-mm-yy-format.

38. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet and do the tasks given at the end of worksheet.
Save the worksheet in My Document folder against your Roll no.
Calculate the percentage = (Lectures attended/Lectures delivered) * 100
Insert a new row at the top of the worksheet. /Give the worksheet heading as
“LECTURES RECORD OF SOME STUDENTS”
Sort in ascending order by percentage.

39. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Create a worksheet for student result sheet as follows.
Calculate the total marks in Total Marks column for each student using SUM function.
Calculate the average marks in Average Marks column for each student using AVERAGE function.

40. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet
Apply formulas: Medical Allowance = 40% of basic pay, House Rent = 45% of the basic pay, Conveyance allowance = 15% of basic pay.
Computer the net pay of each employee against the net pay column by using the formula:
Net pay = Basic Pay + Medical Allowance + House Rent + conveyance Allowance.

41. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet in Excel
Enter sample data in column 1, 2, 3 and 4 for at least 7 consumers.
Calculate the Telephone Call Charges on the following Rates:
Local Call = Rs. 2.20 per call
NWD Call = Rs 8.50 per call
Mobile Call = Rs. 7.50 per call
Apply formula to computer ‘Sales tax as 12% of Total Call Charges and Line rent is 280 fixed for all consumers.
Calculate Total Dues by formula: Total Dues = Total Call Charges + Sales Tax + Line Rent.

42. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare the worksheet
Enter sample data in column 1, 2, 3 for Consumer’s Bill for at least 9 consumers.
Apply formula to calculate Gas Consumed and Gas Charges @ Rs. 0.50 per 1000 (hm3) for each consumer.
Compute General Sales Tax at 15% of Gas Charges and Meter Rent is Rs. 20 fixed for each consumer.
Completer ‘Due Amount’ as Due Amount = Gas Charges + General Sale Tax + Meter Rent.

43. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.

Prepare the worksheet in the same format
Apply formula Current Units – Previous Units to calculate Units Consumed.
Computer electricity charges according to the following rates

001 – 100 Units	Rs.2.25 per unit
Above 100 units	Rs.3.15 per unit

Calculate surcharge 15% of electricity charges.

44. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Make a worksheet
Enter sample data in column 3, 4 and 5 for queries asked for courses 'ICS', 'BCS', and 'MCS'.
Apply formula to calculate the performance of an institution on the basis of Total Queries asked for different courses by the students on the following ground:
Greater than or equal to 30 queries per day = Excellent
Greater than or equal to 20 queries per day = Very Good
Greater than or equal to 10 queries per day = Good
Greater than or equal to 5 queries per day = Satisfactory
Less than 5 queries per day = Unsatisfactory

45. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare following worksheet and change font of heading row to 10pt bold Courier New.
Complete the remaining four column using formula: Total amount through cars = 10X number of cars. Total amount through buses = 20 X number of buses. Total amount through trucks = 25 X number of trucks, Total =sum of entries of three columns against each day.
Draw "Stacked Column" chart between first & last column, taking days along X-axis and total of each day entries at top of graph bars. Give the title "MOTORWAY" to chart and inset it in sheet 2.
Copy this chart in sheet3 and change its type to bar chart.

46. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare and save the sheet in My Documents under your Roll No
Enter the sample data in column 3, 4, 5 and 6 against the given captains so that Number of matches must be equal to the sum of data given in column 3, 4, 5 and 6 for each captain.
Highlight the captain row in purple color and change font to White color. Apply the formula to calculate percentage of Matches won=Matches * 100 of each captain.
Draw a "Column" chart of "Name of Captain" and "Percentage of Matches Won".
Save the changes and close Excel.
Rename this file as "Renamed Excel: and make a duplicate file.

47. Perform the Following Tasks in MS-EXCEL and write the stepwise procedure.
Prepare a work sheet in Excel consisting of following center aligned bold columns Roll No., Name, Paper1, Paper2, Paper3, Total, Average, Grades
Apply validation rule to restrict Roll No's as whole numbers only. Enter arbitrary values in first three columns (assign marks out of 100 in each subject).
Apply formula to calculate total marks.
Apply formula to calculate average marks.
Apply conditional formatting to total column to display marks in the following Colors:

200 or Above	Blue color
Greater than 100 and less than 200	Purple color
100 or less	Mahron color

Calculate grades on the following percentage of marks:

70% and above	A
>=40% and <70%	B
<40%	C

48. MS-Excel Short Keys, Viva Voce

LIST OF PRACTICALS FOR CLASS-XII (PART – II)

1. Perform the following tasks and write down the stepwise procedure.
Create a new blank database with file name Employees.
Create a new table in Design view and add fields to the table as follows:
Make the Social Security No field primary key and save the table as Employees.
Open the table in Datasheet view and add five records in the table.

2. Perform the following tasks and write down the stepwise procedure.
Create the table and add the records.
Open Employees table and change Field Size property of Social Security No to 11.
Change Decimal places property of Salary field to 0 (Zero).
Choose Short Date Form Format property box of Birthdate field.
Add a caption to each field as shown below and save changes:
Set Department field to require.

3. Perform the following tasks and write down the stepwise procedure.
Create the table and add the records.
Apply validation rule on social security that it must not be zero. It should display 'No valid No' if the user enters wrong data.
Hide last name. First name. Social security no and Department.
Delete record having DOB13-Jan-83.
Rename Employees table to 'Workers Data'.
Freeze the salary column.
Find record having name Raza & Replace it with Talha.
Sort Department column in descending order.

4. Perform the following tasks and write down the stepwise procedure.
Create a table named 'Instructor' (Id, Name, City, and Phone).
Add Input mask property to Phone field so it takes numbers in (+092) 41 733474 formats.
Add five records in the table.

5. Perform the following tasks and write down the stepwise procedure.
Create a table called Workshop Registration
Insert ten records in the table.
Create a query that shows First Name, Last Name and Workshop for workshop participants.

6. Perform the following tasks and write down the stepwise procedure.
Create a table Employee with the following structure (EmpNo as primary key).
Add given records in table.

7. Perform the following tasks and write down the stepwise procedure.
Create a table called Client
Enter the following records in the table:
Create query in design view to display the entire salesmen who are located in FSD.
Create query in design view to find out the salesman who stays in a city whose second letter is 'H'.

8. Perform the following tasks and write down the stepwise procedure.
Create a table Employee
Insert five records in table
Create a query to display calculated field of total salary using expression builder:
Total Salary = Salary + Bonus
Create a report using auto report.

9. Perform the following tasks and write down the stepwise procedure.
Create the tables in Access
Employee (Empld, EmpName, Job Sal DeptNo)
Department (DeptNo, Dname, Loc)
Develop relationship between both the tables.
Insert the following records in Department table
Insert the following records in Employee table
Write a query to display the minimum salary earned by clerk.
Write a query to calculate the average salary of all employees.
Write a query to list the employee names and salary increased by 15%.

10. Perform the following tasks and write down the stepwise procedure.
Create a table called student

Make sure that AdmDate is less than or equal to current date.
Create a columnar form to input data to insert five records.
Create a report using the Report wizard.

11. Write a program that inputs Name, Age and Address from the user and displays it on the Screen.
12. Write a program that inputs Base and Height from the user and Calculates area of a triangle by using the formula Area / ½ *BASE* height.
13. Write a program that inputs temperature from the user in Celsius and Converts it into Fahrenheit using the formula F = $\frac{9}{5}$*C+32.
14. Write a program that inputs 4 number and calculates the sum, average and product of all the numbers.
15. Write a program that inputs radius from the user and calculates area and circumference of circle using formula area = = $\pi R^2$and Circumference =$2\pi R$.
16. Write a program that inputs a three digits number from the user and displays it in reverse order. For example, if the user enter 123, it displays 321.
17. Write a program that inputs miles from the user and converts miles into kilometers. One mile is equal to 1.609 kilometer.
18. Write a program that finds area of triangle when three sides A, B and C of the triangle are given. It inputs value of a A, B and C. Formula of the area of Triangle is AREA =$\sqrt{s(s-a)}(s-b)(s-c)$WHERES =$(a+b+c)/2$.
19. Write a program that inputs temperature in Fahrenheit and converts it into Celsius.
20. Write a program that inputs a number and finds whether it is even or odd using If-Else structure.
21. Write a program that inputs a number from user and determines whether it is positive, negative or zero.
22. Write a program that inputs test score of a student and displays his grade on the following criteria.
23. Write a program that inputs three numbers and displays the smallest number by using nested if condition.
24. Write a program that inputs a character and displays whether it is vowel or consonant using switch statement.
25. Write a program that displays counting from 1 to 10 using while loop.
26. Write a program that displays first 5 numbers and their sum using while loop.
27. Write a program that displays first five numbers with their squares using while loop.
28. Write a program that inputs two number and exchanges their value. The program should display the value sof variables of before and after exchanges.
29. Write a program that inputs a number from the user and display a table of that number using while loop.
30. Write a program that inputs a number from the user and displays the factorial of that number using while loop.
31. Write a program that displays Sum of the following series using while loop.1 + 1/2 + 1/4 + 1/6 + … + 1/100.
32. Write a program that displays sum of the following series using while loop.1 + 1/3 + 1/5 + 1/7 + … + 1/99.
33. Write a program that inputs starting and ending point from the user and displays all odd numbers in the given range using do-while loop.
34. Write a program that inputs two numbers from user and displays the result of first number raise to the power of second number using do while loop.
35. Write a program that produces the following output.
36. Write a program to display alphabets from A to Z using for loop.
37. Write a program that inputs a number from the user and displays the factorial of that number using do while loop.
38. Write a program that displays product of all odd numbers from 1 to 10 using for loop.
39. Write a program that inputs a number from the user and displays the factorial of that number using for loop.
40. Write a program that inputs table number and length of table and then displays the table using for loop.

41. Write a program that inputs a positive integer number from the keyboard and displays it's in reverse number. For example, the reverse of 345 is 543.
42. Write a program to calculate and display the sum of following series using for loop$x + x^2 + x^3 \ldots x^n$.
43. Write a program that displays the following shape using while loop.
44. Write a program to calculate and display the sum of the following series using for loop: 1/2 + 2/3 + 3/4 + … + 99/100.
45. Write a program that inputs five values and displays their squares and cubes using loop.
46. Write a program that displays the following shape using nested loops. The outer loop should be for loop and inner loop should be while loop.
47. Write a program that displays the following block using nested for loop.
48. Write a program that displays the following shape using nested for loops.
49. Write a program that displays the following shape using nested for loops.
50. Write a program that displays the following shape using nested for loops.
51. Write a program that inputs an integer and displays whether it is a prime number or not.
52. Write a program that inputs two numbers in main function and passes these numbers to a function. The function displays the maximum number.
53. Write a program that inputs two numbers in main function and passes the number to a function. The function displays the factorial of that number.
54. Write a program that inputs a number in main function and passes the number to a function. The function displays the factorial of that number.
55. Write a program that inputs two numbers in main function and passes them to a function. The function displays first number raised to the power of second number.
56. Write a program that inputs two integers and then passes them to four functions add (), subtract (), multiply () and divide () one by one.
57. Write a program that finds sum of the squares of integers from 1 to n. Where n is a positive value entered by the user (i.e. sum = 12 + 22 + 33 + ... + n2).
58. Write a program to calculate and display the sum of the following series using for loop: 1 + 2x + 3x2 + 4x3 + 5x4.
59. Write a program that displays the following output using nested for loop.
60. Write a program that displays the following shape using nested for loop.
61. Viva voce

Computer Science Part – I

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