Class XII : Computer Science: Term 1(Half Yearly): 2021- 2022 : Marks 35

Unit No.	Unit Name	MCQ (1 mark)	VSA (1 Mark)	LA (2 marks)	Total marks
Unit-1	Computer system and organization .Revision of the basic of python. .Functions	3	6	2x1	11
Unit-2	Data management .Relational databases	3	6	2x1	11
Unit-3	Programming and computational Thinking .cyber safety . Appropriate usage of social network	5	8	-	13
Total marks		11	20	2x2	35

*Practical = 10 marks;

* Lab note book and viva = 3+2 = 5 marks

Class XII : Computer Practical : Term-1(Half Yearly) : 2021-22 : Marks 15

Expt -10 ; Lab Note book-3 ; Viva -2 : Total = 15

5.1Unit-4: Python Lab

- Recursively find the factorial of a natural number.
- Read a file line by line and print it.
- Remove all the lines that contain the character `a' in a file and write it to another file.
- Write a Python function sin(x, n) to calculate the value of sin(x) using its Taylor series expansion up to n terms. Compare the values of sin(x) for different values of n with thecorrect value.
- Write a random number generator that generates random numbers between 1 and 6(simulates a dice).

5.1. Unit-5: SQL Lab

At least the following SQL commands should be covered
during the labs: create, insert, delete, select, and join. The following are some representativeassignments.

- Create a student table with the student id, name, and marks as attributes where the student idis the primary key.
- Insert the details of a new student in the above table.
- Delete the details of a particular student in the above table.
- Use the select command to get the details of the students with marks more than 80.

Class XII : Computer Practical : Term-II (Board Final) : 2021-22 : Marks 15

Expt -10 ; Lab Note book-3 ; Viva -2 : Total = 15

5.1Unit-4: Python Lab

- Write a recursive code to find the sum of all elements of a list.
- Write a recursive code to compute the nth Fibonacci number.
- Write a Python program to implement a stack and queue using a list data-structure.
- Write a recursive Python program to test if a string is a palindrome or not.
- Write a Python program to plot the function y = x2 using the pyplot or matplotlib libraries.

5.2. Unit-5: SQL Lab

At least the following SQL commands should be covered
during the labs: create, insert, delete, select, and join. The following are some representativeassignments.

- Create a new table (name, date of birth) by joining two tables (student id, name) and (studentid, date of birth).
- Create a new table (order ID, customer Name, and order Date) by joining two tables (orderID, customer ID, and order Date) and (customer ID, customer Name, contact Name, country).