QUESTION BANK

Module 3

1. Define an array with syntax. List and explain different initialization methods for a 1D array and 2D array.
2. List operations on array and explain any two
3. Explain memory representation of 1D array.
4. Develop a program to input two m*n matrices and then calculate the sum of their corresponding elements and store it in a third m*n matrix.

Module 4

1. Design and develop a program to find the element using binary search.
2. Bubble sort algorithm program.
3. Compare and contrast linear search with binary search.
4. What is a string with declaration and initialization?
5. Write a program to find the length of a string without using string handling functions.
6. Explain any five string manipulation function with examples.

7. Design a program to find the root mean square (RMS) value of a set of voltage samples using pointers. The program should read N voltage values into an array and compute the RMS using pointer arithmetic.

Module 5

1. Explain Structures with declaration, initialization.
2. How do we access the members of the structures?
3. Write a note of passing structures to functions.
4. What are unions, illustrate with an example.
5. Explain Nested structures with example.
6. Define a student structure with members: roll_no, name, fees and DOB. Develop a program, to read and display the information about the student.
7. Illustrate copying and comparing structures.
8. Demonstrate structure within a structure with examples.
9. Explain the concept of unions inside structures with a suitable program.
10. Develop a program to read and display the information of all the students in the class (Use array of structures).
11. Compare and contrast Structures with Unions.