QUESTION BANK(Module 4 and Module 5)

SUBJECT NAME: Principles of Programming using C   **Subject code: BPOPS103**

Note: All questions need to be explained with appropriate code snippets

1. What is a string? Explain how to declare and initialize a string with examples.
2. Explain all the string handling functions with syntax and example program for each.
3. Explain array of strings in detail with example program.
4. Write a program for the following without using string handling functions.

    i)string copy ii)string concatenation iii)string comparison iv) string length

    v) string reverse.

5. Define pointer variable. Explain with example the declaration and initialization of pointer variable.

6.Give the advantages and disadvantages of pointers. Develop a c program to read two numbers and functions to swap these numbers using pointers.

7. Explain pointers and arrays.

8. Explain pointers as function arguments.

9. Explain functions returning pointers.

10. Write a C program using pointers to compute sum, mean and standard deviation of all elements stored in an array of n real numbers.

11. Explain Structure definition and declaration of structures with suitable example.

12. Explain the following in structures:

    i)   Initialization
    ii)   Accessing the members of the structure
    iii)   Copying and Comparing Structures
    iv)   sizeof operator in structures

13. Explain nested structures and array of structures.

14. Explain the three ways in which a function can access the members of the structure.

15. Explain the declaration, initialization and accessing members of union.

16. Explain unions in structures with an example program.

17. Explain enumerated datatype in detail

18. Differentiate structures and unions

19. Write a C program to store and print name, USN, Subject and IA marks of students using structure.

20. What is a file and its types? Explain the steps to use a file in C language.