VR23

Time: 3 hours   *Max. Marks: 70*

Part-A is compulsory

Answer One Question from each Unit of Part - B

Answer to any single question or its part shall be written at one place only

PART-A

5 x 2 = 10M

1. a. Define Program and list the characteristics of a program. **(CO1 K1)**

    b. Write about ternary operator.   **(CO2 K1)**

    c. Write uses of pointers.   **(CO2 K1)**

    d. Define scope and life time of a variable.   **(CO3 K1)**

    e. Mention the differences between text and binary file.   **(CO4 K1)**

PART-B

4 x 15 = 60M

UNIT-I

2. a. Describe basic organization of a computer. **(CO1 K2) 9M**

b. Define flowchart and draw a flow chart to print the biggest number among three numbers. **(CO1 K2) 6M**

(or)

3. a. Define Algorithm. List the characteristics of an Algorithm. **(CO1 K2) 6M**

b. Explain about space and time complexities of algorithms. **(CO1 K2) 9M**

UNIT-II

4. a. Show how break and continue statements are used in a C-program, with example. **(CO2 K2) 6M**

b. Explain various conditional statements with syntax and examples. **(CO2 K2) 9M**

(or)

5. a. What is an array? How a single dimension and two dimension arrays are declared and initialized?Explain with an example. **(CO2 K2) 9M**

b. Explain the different types of loops in C with syntax. **(CO2 K2) 6M**

UNIT-III

6. a. What is a pointer? Explain how the pointer variable declared and initialized. **(CO3 K2) 6M**

b. Write a C Program to find number of characters in a given string without using library function. **(CO3 K3) 9M**

(or)

7. a. Write a program in C to find the sum and mean of all elements in an array using pointers. **(CO3 K3) 9M**

b. List any 4 string functions and explain each with examples. **(CO3 K2) 6M**

UNIT-IV

8. a. Explain call by value and call by reference with example each. **(CO4 K2) 6M**

b. Distinguish between structures and unions w.r.t memory allocation and accessing.Explain with an example. **(CO4 K2) 9M**

(or)

9. a. Explain the following
i) fprintf ( )   ii) fscanf ( )   iii) fgets( )   iv) fputs ( ). **(CO4 K2) 8M**

b. What is user defined function? Write a program to find the factorial of a given number using user defined function. **(CO4 K3) 7M**

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