ESC103 - Programing for Problem Solving

P. Pages : 1

Time : Three Hours

16 14

GUG/S/23/13172

Max. Marks : 80

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1.	a)	What is the history of C - language? Explain its features.	**8**
	b)	Define flowchart. Explain with an example.	**8**

OR

2.	a)	Write a program to find the area of triangle.	**8**
	b)	What is algorithm? Write a program to print "Hello World".	**8**

3.	a)	Explain with example, the various constants available in "C" language.	**8**
	b)	What is Operator? Explain any one operator.	**8**

OR

4.	a)	What are basic data types available in "C"? Write the significance of each data type.	**8**
	b)	Define:	**8**

    i) Variable   ii) Constant
    iii) Associativity   iv) Precedence

5.	a)	Write a C program to find the factorial of a number using do - while loop, where the number n is entered by the user.	**8**
	b)	List all conditional statements used in C. Explain any two with syntax and example.	**8**

OR

6.	a)	Explain call by value and call by reference with examples.	**8**
	b)	Write a program to find factorial number by using recursion.	**8**

7.	a)	What is array? Explain the declaration and initialization of two dimensional arrays with an example.	**8**
	b)	Write a program in C to store elements in an array and print it.	**8**

OR

8.	a)	Write a C program to find the largest element by passing array as function argument.	**8**
	b)	Write a C program to add two matrices using Multi - dimensional array.	**8**

9.	a)	What is pointer? Explain how the pointer variable declared and initialized?	**8**
	b)	How to assign values to structure members? Explain with example.	**8**

OR

10.	a)	What is structure? Explain the C syntax of structure declaration with example.	**8**
	b)	Explain Pointer to Pointer (Double Pointer) with example.	**8**

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