GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–I &II (OLD) EXAMINATION – SUMMER-2019

Subject Code: 110003   **Date: 10/06/2019**

Subject Name: Computer Programming And Utilization

Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Define (i) Compiler (ii) Interpreter (iii) Assembler. Explain the types of programming languages.	**07**
	(b)	Explain the structure a C program giving example.	**07**
Q.2	**(a)**	Explain increment, decrement and sizeof operators in C with examples of each.	**07**
	(b)	What is nested if-else statement? Draw flowchart for a program to print maximum out of three numbers.	**07**
Q.3	**(a)**	Write a program and draw the flowchart for a program to print the following 4 3 2 1 3 2 1 2 1 1	**07**
	(b)	Explain switch-case statement giving example.	**07**
Q.4	**(a)**	Write a program to reverse a number.	**07**
	(b)	Draw flowchart and write a program to find factorial of a given number.	**07**
Q.5	**(a)**	Define an array. Explain declaration and initialization of two dimensional array with example.	**07**
	(b)	Explain the following string handling functions: (i) strlen( ) (ii) strcpy( ) (iii) strcat( ) (iv) strcmp( ) (v) puts( ) (vi) gets( ) (vii)putchar( )	**07**
Q.6	**(a)**	Explain recursive function with example.	**07**
	(b)	Explain scope and lifetime of a variable in detail.	**07**
Q.7	**(a)**	Giving example explain Structure and Unions in C.	**07**
	(b)	What is a File? Explain the entire file handling functions and mode of a File.	**07**

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