GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code: CPU002   **Date: 01/06/2019**

Subject Name: Computer Programming and Utilization-2

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)**	Explain the major components of computer system with the proper diagram.	**07**
	(b)	Explain arithmetic and relational operator with an example.	**07**
Q.2	**(a)**	Write a C program to find factorial of a given number.	**07**
	(b)	Write a C program to print following pattern:	**07**

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* *
* * *
* * * *
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Q.3	**(a)**	Explain the use of else..if ladder with an example.	**07**
	(b)	Explain switch statement with an example.	**07**
Q.4	**(a)**	Differentiate entry controlled loop and exit controlled loop.	**07**
	(b)	Write a C program to find maximum value out of array of 10 elements.	**07**
Q.5	**(a)**	What is recursion? Explain with an example.	**07**
	(b)	Write a C program to find sum of two numbers using user defined function.	**07**
Q.6	**(a)**	What is pointer? Explain the concept of call by reference with an example.	**07**
	(b)	What is the significance of malloc, calloc and realloc?	**07**
Q.7	**(a)**	Write the syntax and significance of fopen(), fclose() and ftell().	**07**
	(b)	Explain any three string handling functions with an example.	**07**

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