

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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* * * *
- 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**
