

**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 **07**
- 4 3 2 1
3 2 1
2 1
1
- (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: **07**
- (i) strlen() (ii) strcpy() (iii) strcat() (iv) strcmp()
(v) puts() (vi) gets() (vii) putchar()
- 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**
