

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER- I & II (OLD) EXAMINATION – WINTER 2019****Subject Code: 110003****Date: 07/01/2020****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) Explain types of programming languages. Differentiate between compiler and interpreter. **07**
(b) Define algorithm and explain different symbols used in flowchart **07**
- Q.2** (a) Explain different data types used in C Language. **07**
(b) Write a program that converts Fahrenheit temperature to centigrade **07**
Cent. = $5/9(\text{fahr.} - 32)$
- Q.3** (a) Explain scanf() and printf() with syntax. **07**
(b) Explain different operators in C. **07**
- Q.4** (a) State the different types of If statement and explain any one with proper example. **07**
(b) What is the purpose of switch statement? Explain its syntax with an example. **07**
- Q.5** (a) Write a C program to capitalize all the letters of a string entered. **07**
(b) Explain two dimension arrays and write a program to read and write a 2D array. **07**
- Q.6** (a) What is array of pointers? How its declared and explain in brief. **07**
(b) Write a program to do swapping of two numbers without using temporary variable using functions. **07**
- Q.7** (a) Difference between Structures and Unions. **07**
(b) Explain File operations in C. **07**
