Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE SEMESTER- 1st / 2nd(OLD) EXAMINATION - SUMMER 2017

Subject Code:110003 Date: 03/06/2017 **Subject Name: Computer Programming and Utilization** Time:2:30 pm to 5:00 pm **Total Marks: 70 Instructions:** 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. (a) Explain types of programming languages. Differentiate between compiler and **Q.1** 07 interpreter. **(b)** Define flowchart and algorithm and give one example of each. 07 0.2 Explain the structure of a C program giving example. 07 Name the operators in C language and give the precedence and associativity of 07 each. 0.3 Write a program for simple calculator using switch-case statement. 07 (a) Explain nested if-else statement giving example. 07 07 0.4 (a) Write a program to print 1 121 12321 (b) Define array. Write a program to enter elements in a 2×2 array and print the 07 same. 0.5 Write a program to reverse a string without using inbuilt string reverse function. 07 What is a user defined function? Explain function call by reference giving **07** example. What is dynamic memory allocation? Define malloc (), calloc (), free () and **Q.6** 07 realloc (). **(b)** Explain scope and lifetime of a variable in detail. 07 0.7 (a) Define structure. Write structure that named book which consists of three data 07 fields, namely name, price and pages. How can we access structure variables?

(b) What is a File? Explain the entire file handling functions and mode of a File.

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