GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEMESTER– 1^{st} / 2^{nd} (OLD) EXAMINATION – SUMMER 2017

Su	bject	Code:110003 Date: 03/06/203	17	
Subject Name: Computer Programming and Utilization Time:2:30 pm to 5:00 pm Instructions: Total Ma			rks: 70	
	1. 2.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Explain types of programming languages. Differentiate between compiler and interpreter.	07	
	(b)	Define flowchart and algorithm and give one example of each.	07	
Q.2	(a) (b)	Explain the structure of a C program giving example. Name the operators in C language and give the precedence and associativity of each.	07 07	
Q.3	(a) (b)	Write a program for simple calculator using switch-case statement. Explain nested if-else statement giving example.	07 07	
Q.4	(a)	Write a program to print 1 1 2 1 1 2 3 2 1	07	
	(b)	Define array. Write a program to enter elements in a 2×2 array and print the same.	07	
Q.5	(a) (b)	Write a program to reverse a string without using inbuilt string reverse function. What is a user defined function? Explain function call by reference giving example.	07 07	
Q.6	(a)	What is dynamic memory allocation? Define malloc (), calloc (), free () and realloc ().	07	
	(b)	Explain scope and lifetime of a variable in detail.	07	
Q.7	(a)	Define structure. Write structure that named book which consists of three data fields, namely name, price and pages. How can we access structure variables?	07	
	(b)	What is a File? Explain the entire file handling functions and mode of a File.	07	
