Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE- I[st] /IInd SEMESTER–EXAMINATION – MAY/JUNE - 2012

Subject code: 110003   **Date: 04/06/2012**
Subject Name: Computer Programming and Utilization
Time: 10:30 am – 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.**
4. **Each question carry equal marks**

Q.1	(a)	What is flowchart? Draw a flowchart to print first N Fibonacci numbers.	**07**
	(b)	Explain the ?: (ternary) and sizeof operators with proper examples.	**04**
	(c)	What is software? List the various categories of software and their use.	**03**
Q.2	(a)	Explain the multiple (ladder) if-else with syntax and proper example.	**06**
	(b)	Assume that you want to make the sum of 1 to 100. Give the necessary code to perform the same using (1) For loop (2) While loop (3) Do-while loop	**06**
	(c)	Differentiate between compiler and interpreter.	**02**
Q.3	(a)	Write a program to find the minimum value from the array of 3x3.	**07**
	(b)	What are the logical operators in C? List and explain them.	**04**
	(c)	Explain the use of break statement with example.	**03**
Q.4	(a)	What is function? Explain the function definition, function prototype and function call with example.	**07**
	(b)	What do you mean by local and global variables? Give their scope and life time and compare them.	**04**
	(c)	What is call by value? Clear it with example.	**03**
Q.5	(a)	Write a program which accepts a long string and print only characters at positions which are multiple of 3.	**08**
	(b)	What is pointer? Clear it with examples and give its use.	**04**
	(c)	Define the union.	**02**
Q.6	(a)	Write a function which accepts a string and returns the length of the string.	**05**
	(b)	What is structure? Define the structure and explain how to access the structure members.	**05**
	(c)	Show the use of the malloc() function.	**04**
Q.7	(a)	What is file management? List the different file management functions and explain the various file modes.	**07**
	(b)	Write a program to display the contents of a given file.	**05**
	(c)	List the various in-built string functions.	**02**

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