

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE- I<sup>st</sup> /II<sup>nd</sup> 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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