

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. Sem-I Remedial examination March 2009****Subject code: 110003****Subject Name: Computer Programming and Utilization****Date: 17 / 03 /2009****Time: 02:00pm To 4:30pm****Instructions:****Total Marks: 70**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- | | | |
|-------------|--|-----------|
| Q.1 | (a) Describe various types of computer languages and mention its advantages and disadvantages
(b) What is Algorithm and flowchart? Explain both with some suitable example | 14 |
| Q.2 | Define any fourteen from the following
(a) (1) Token (2) Identifier (3) Constant (4) Type casting (5) Destructor (6) Storage class (7) Inline function (8) Friend function (9) Call by value (10) Call by reference (11) Pointer (12) Scope and life time of variable (13) Turnery operator (14) Object (15) 'void' – data type (16) Dynamic memory allocation | 14 |
| Q.3 | (a) What is an Array? Explain multidimensional array with suitable sample program in 'C'
(b) Define syntax of Functions in 'C', Write a sample program in to and demonstrate usage of "Function with arguments and return values
or | 14 |
| Q.3 | (a) How to initialize Pointer? Explain arrays of pointer using suitable sample program
(b) Describe various string handling operation using sample 'C' codes | 14 |
| Q.4 | (a) Describe nested Structures and demonstrate using 'C' program
(b) Explain difference between unions and structures
or | 14 |
| Q. 4 | (a) Explain features of object oriented programming language
(b) Write a C++ program to demonstrate memory allocation for objects | 14 |
| Q.5 | (a) Explain the usage of constructor and destructor in C++
(b) Write a C++ program to demonstrate copy constructor
or | 14 |
| Q.5 | (a) Write short note on Polymorphism
(b) Draw block diagram of computer and explain each block | 14 |
