

GUJARAT TECHNOLOGICAL UNIVERSITY**PDDC - SEMESTER-I • EXAMINATION – SUMMER 2013****Subject Code: X10002****Date: 05-06-2013****Subject Name: Computer Programming and Utilization****Time: 02.30 pm - 05.00 pm****Total Marks: 70****Instructions:**

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

Q.1 (a) What is pointer? Write a program to do swapping of two elements using pointers. **07**

(b) What is difference between 'for' loop and 'while' loop. **07**
Write a program using 'for' loop.

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

Q.2 (a) Draw the Block Diagram of Computer Architecture and explain each block with its functions. **07**

(b) How to define and declare Single dimensional array. Write a C program to arrange single dimensional array of 5 elements in Ascending order. **07**

OR

(b) Explain Nesting of IF...ELSE statement and the ELSE.....IF ladder with example. **07**

Q.3 (a) Write a Program to demonstrate the "call by value" and "call by reference" concept in C **07**

(b) Write a "C" program to swap even position number with odd position and vice versa. **07**

OR

Q.3 (a) List out the categories of functions. Explain any one category with example. Also Explain difference between unions and structures. **07**

(b) What is the difference between 'while' loop and 'do while' loop. Write a program using 'while' loop to reverse the digits of the number. For example the number is 12345 should be printed as 54321. **07**

Q.4 (a) Explain the usage of constructor and destructor in C++. Write a C++ program to demonstrate the use of Constructor and Destructor. **07**

(b) What is Friend function? Write a C++ Program to show usage of Friend Function **07**

OR

Q.4 (a) Write a C++ Program to demonstrate the operators' hierarchy **07**

Q.4 (b) Create a class named student having data member name, rollno, and three marks. Write a member function to: **07**
(i) input name, rollno and marks
(ii) calculate percentage
(iii) display all the information

