GUJARAT TECHNOLOGICAL UNIVERSITY
P.D.D.C. Sem- I Examination January 2010
Subject code: X10002
Subject Name: COMPUTER PROGRAMMING & UTILISATION

Date: 02 / 01/ 2010   Time: 11.00 am – 1.30 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)** Distinguish between programming languages "C" and "C++" **07**

(b) Draw the flowchart to identify minimum number out of given five input numbers. **07**

Q.2 **(a)** In what way *main( )* is different from the rest of the functions? **07**

(b) Justify: Machine dependent implementation increases portability. **07**

OR

(b) What are enumeration variables? How they are declared? What is the advantage of using them in a program? **07**

Q.3 **(a)** What is the difference between Pre-Decrement and Post-Decrement operation? Explain with suitable example. **07**

(b) Write a "C" Program that reads number from 1 to 7 and accordingly it should print MONDAY to SUNDAY. **07**

OR

Q.3 **(a)** Distinguish between the following: **07**
      (i)   Actual and Formal arguments
      (ii)   Automatic and Static variables

(b) Write a "C" program that read an input string and count number of words in the string and print counted words. **07**

Q.4 **(a)** Write a "C" program to swap even position number with odd position and vice – versa. **07**

(b) Write a "C" program that read one dimensional array of five different values and print the same using pointer. **07**

OR

Q.4 **(a)** Explain the difference between "call by reference" and "call by value" with suitable example. **07**

(b) What is recursive function? Explain with example. **07**

Q.5 **(a)** What does inheritance mean in "C++". What are different forms of inheritance? Explain with syntax. **07**

(b) Create a class point having data member X and Y of type integer. Write member function program in "C++" to input two input points and display the addition of two points. **07**

OR

Q.5 **(a)** What are inline functions" Write an inline function for finding minimum of two numbers in "C++" program **07**

(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

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