

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
PDDC - SEMESTER-I • EXAMINATION – WINTER 2013

Subject Code: X10002

Date: 19-12-2013

Subject Name: Computer Programming and Utilization

Time: 10.30 am - 01.00 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) Draw and explain the block diagram of digital computer. [7]

Q.1 (b) Write a note on: Generations of programming languages. [7]

Q.2 (a) Explain the various data types supported by C. [7]

Q.2 (b) What are bitwise operators? List them and explain their purpose. [7]

OR

Q.2 (b) Write a program to read a “float” representing a number of degrees Celcius, and print as a “float” the equivalent temperature in degrees Fahrenheit. Print your results in a form such as 100.0 degrees converts to 212.0 Fahrenheit. [7]

Q.3 (a) Write a program to read in 10 numbers and compute the average, maximum and minimum values. [7]

Q.3 (b) Compare the switch statement with the nested-if statements. [7]

OR

Q.3 (a) List the common methods used for sorting and searching. Explain anyone method for sorting and searching. [7]

Q.3 (b) Write a program in C to reverse the input string. [7]

Q.4 (a) Write a program in C to count number of positive, negative and zero elements from 3 x 3 matrix. [7]

Q.4 (b) Write a note on function of type void. [7]

OR

Q.4 (a) Name the four storage classes supported by C and explain one in detail. [7]

Q.4 (b) What is the purpose of external variable? What is its scope and default value? Where is it stored? [7]

Q.5 (a) Write a detail note on pointer conversion. [7]

Q.5 (b) Write C programs input and output yourname, address and age to an appropriate structure. [7]

OR

Q.5 (a) Explain the use of dot and arrow operator with example. [7]

Q.5 (b) Write program using enumerated types which when given today's date will print out tomorrow's date in the for 31st January, for example. [7]
