Reg. No.

First Semester B.C.A. Degree Examination, Oct./Nov. 2013
COMPUTER CONCEPTS AND C PROGRAMMING (Repeaters)

Time : 3 Hours

Max. Marks : 80

Instruction : Answer **any five full** questions.

1. a) What is computer ? Draw a neat block diagram of computer and explain its components.

   b) Differentiate primary memory and secondary memory. **(8+8)**

2. a) Define an algorithm. Write its characteristics.

   b) Write the basic structure of 'C' program and explain.

   c) Define the terms constant and variable. **(4+8+4)**

3. a) Convert the following expressions into 'C' expressions

   i) $\left(\dfrac{x}{y}\right)^{n-1}$

   ii) $\sqrt{\dfrac{x^2+y^2}{2}}$

   b) Write an algorithm to find sum of natural numbers upto n.

   c) Explain any four C-operators. **(4+4+8)**

4. a) Explain briefly branching statements in 'C'.

   b) Write a 'C' program to check the given number is prime or not. **(8+8)**

5. a) Explain the following string handling functions.

   i) strcpy( )
   ii) strcat( )
   iii) strcmp()
   iv) strlen( )

   b) How do you initialise two dimensional array ? Write a 'C' program to subtract two matrices. **(8+8)**

6. a) What is structure ? How it is different from an array ?

    b) Write a 'C' program to accept different goods, numbers, price and date of purchase and display them using structure.   **(6+10)**

7. a) What is pointer ?

    b) Explain briefly various categories of UDF.

    c) Write a 'C' program using function to compute the minimum of two numbers.

                                                                                       (2+8+6)

8. Write a short notes on :

    a) Unformatted I/O functions

    b) C-Tokens

    c) Flowchart

    d) Nested for statement.   **(4+4+4+4)**

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