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KBE-5401

KBE-5401   Seat No._____

First Year   B. C. A. (Sem. II) Examination
April/May – 2012
BCA-201 : Advanced Programming Language 'C'
(New Course)

Time : **3** Hours]   [Total Marks : **70**

1   (a)   Attempt following questions :   **6**
        (i)   What is Recursion ?
        (ii)   Write a difference between formal parameter and actual parameter.
        (iii) Write a general syntax of function definition.

        (b)   Attempt following questions (any one)   **6**
        (i)   Which are the different categories of function ? Explain any two categories with example.
        (ii)   How can you pass an array as function argument ? Explain with suitable example.

2   (a)   attempt following questions :   **6**
        (i)   Write a general format of structure definition.
        (ii)   What is the use of size of operator ?
        (iii) What do you mean by union ?

        (b)   Attempt following questions (any one)   **6**
        (i)   Write a short note on structure within structure.
        (ii)   State the difference between structure and union.

KBE-5401]   **1**   [Contd....

3 (a) Attempt following questions : **6**
   (i) Define pointer.
   (ii) How can you initialize the pointer variable ?
   (iii) What is scale factor ?

   (b) Attempt following questions (any one) **6**
   (i) Explain pointer to array with suitable example.
   (ii) What is the difference between call by value and call by reference ? Explain with suitable example.

4 (a) Attempt following questions : **6**
   (i) State the difference between getc( ) and getu( ) functions
   (ii) What do you mean by file ?
   (iii) What is preprocessor directives ?

   (b) Attempt following questions (any one) **6**
   (i) Explain command line argument with suitable example.
   (ii) Write a short note on macro substitution.

5 (a) Attempt following programmes (any two) **10**
   (i) Write a program to find factorial of given number using user define function.
   (ii) Write a function prime that returns one (1) if it's argument is a prime number and returns zero (0) otherwise.
   (iii) Design a structure student record to contain name, branch and total marks obtained. Develop a program to read data for 5 students in a class and print them.

(b) Attempt following programmes (any two) **12**

   (i)   Write a program using pointer to determine the length of character string.

   (ii) Write a program to accept 10 numbers and sort them with the use of pointer.

   (iii) Write a program to read data from keyboard, write it to a file called input and display data of input file on the screen.

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