PPF-1741   Seat No._____

B. C. A. (Sem. II) Examination

April / May – 2016

BCA - 201 : Advance Programming Language 'C'

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

1 (a) Do as directed :   **4**

    (i) What is scope ?

    (ii) The Parameters used in function call are __actual__

    (iii) The local variable is also known as __internal__

    (iv) The default type of a function is int by default. (True/False)

  (b) Answer the following questions : (any two)   **8**

    (i) Discuss about recursion with example.

    (ii) Discuss the following.

       (a) Automatic variable

       (b) UDF

       (c) Global variable

       (d) Static Variable.

    (iii) List out the category of function and explain any two.

2 (a) Do as directed : **4**

 (i) The name of the structure is referred to as _tag-name_

 (ii) What is Bit Field ?

 (iii) Structure is a _user def_ data type.

 (iv) Define a general format of structure definition.

 (b) Answer the following : (any two) **8**

 (i) Explain structure within structure with example.

 (ii) Explain array of structure with example.

 (iii) Explain Union with example.

3 (a) Do as directed : **4**

 (i) An integer can be added to a pointer. (True/False)

 (ii) A Pointer variable contains as its value the _address_ to another variable.

 (iii) What is a scale factor ?

 (iv) The _dot_ operator returns the value of the variable to which its operand points.

 (b) Answer the following : (any two) **8**

 (i) What is a pointer ? Explain benefits of pointer.

 (ii) Define call by value and call by reference with example.

 (iii) Define pointer and array with example.

4 (a) Do as directed : **4**

 (i) getw( ) and putw( )

 (ii) free( ) and recall( )

(b) Answer the following : (any two) 8

   (i)   Explain the command line argument with example.

   (ii)   Explain macro substitution with example.

   (iii)   Explain fseek( ) and fteel( ) with example.

5   (a)   Answer the following : (any two) 10

   (i)   Write a program to swap value of two integer number using UDF.

   (ii)   Write a program to check the no. is palindrome or not using UDF.

   (iii)   Design a structure of student record to contain name, branch and total marks obtained. Develop a program to read data for 10 students in a class and print them.

(b) Answer the following : (any two) 12

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

   (ii)   A file named data contain series of integer no. write a C program to read that no. and then write all odd no. into file named odd no. and write all even no. into file named even no. Display all the contents of these file on screen.

   (iii)   Write a C program to work as a DOS copy command using command line argument.