

Printed Pages:

**BCA / D-12**  
**‘C’ PROGRAMMING-II**  
**Paper-BCA-231**

Time allowed: 3 hours

Maximum marks: 80

**Note:** Attempt **five** questions in all, selecting **one** question from each section. **Question no. 1 is compulsory.****(Compulsory Question)**

1. Short answer type question :
  - (a) Explain the difference between size of ( ) and strlen ( ) function? 2
  - (b) What values are returned by a Boolean type function? 2
  - (c) How an array of characters is represented in memory? 3
  - (d) Under what circumstances can a pointer be subtracted from an integer? 3
  - (e) What is significance and special about a + (append) file operating mode? 3
  - (f) If array 1 and 2 are dimensioned as char array 1 [0], array 2 [10]; and array 1 has been initialized, what is the effect of the statement array2=array1; 3

**Section- I**

2.
  - (a) How a pointer to a structured data type is declared? Describe accessing of structure's data elements using pointers. 8
  - (b) Write a program in C – language to reverse a string. 8
3. Write notes on :
  - (a) Memory allocation for Union data type 6
  - (b) strcmp ( ) function 4
  - (c) enum data type and its uses. 6

**Section- II**

4.
  - (a) Explain the meaning of following statements:  
 a = (char\*) & b;  
 c = (float\*) & d; 8
  - (b) Write a program in C – language to locate a person's name in an array of persons's name. 8
5.
  - (a) How an arrays and pointers are related? Describe a method for accessing array using pointers and not subscripts. 10
  - (b) Differentiate calloc ( ) and malloc ( ) memory allocation functions. 6

**Section- III**

8. Explain syntax and working of following file handling functions:
  - (a) fopen ( ) 3
  - (b) feof ( ) 3
  - (c) fflush ( ) 3
  - (d) ftell ( ) 3
  - (e) rewind ( ) 4

7. (a) Write a program in C – language to change every lower case character in a file to upper case character. 8  
(b) Write a program to copy contents of a file into another file in binary mode. 8

#### **Section- IV**

8. Explain the following directives :
- (a) # include 2
  - (b) # undef ( ) 3
  - (c) # pragma 3
  - (d) # if 2
  - (e) # error 3
  - (f) # line 3
9. Write macro definitions with arguments for calculating area of Triangle, square and circle? Store these macros in a file called “area.h” and include this file in your program? 16