



**AAF-6101**

Seat No. 1243

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

**April / May - 2018**

**BCA - 201 : Advanced Programming  
Language "C"**

**Time : 3 Hours]**

**[Total Marks : 70**

**1 (a) Attempt the followings :**

**4**

- (1) Define : Scope of variable.
- (2) What is function ?
- (3) Local variables are visible in all blocks and functions in the program (True/False)
- (4) A variable declared inside a function by default assumes \_\_\_\_\_ Storage class.

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

**8**

- (1) List out the categories of function. Explain function with argument and NO return value with example.
- (2) What is Recursion ? Explain with example.
- (3) How to pass one-dimensional array to function explain with example.

**2 (a) Attempt the followings :**

**4**

- (1) Differentiate array with structure.
- (2) Explain definition of structure and initialization of structure members.

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

- (1) Explain Array with structure with example.
- (2) Explain Union with example
- (3) Explain array of structure with example.

3 (a) Attempt the followings : 4

- (1) List out any one benefit of pointer.
- (2) What is Pointer ?
- (3) Define : Scale factor.
- (4) A pointer may be initialized to 0, NULL or an address. The value NULL points to nothing (True/False)

(b) Answer the followings (any two) 8

- (1) Explain strings as Pointers with example.
- (2) Explain initialization and accessing one-dimensional array element using pointer.
- (3) Explain pointers as function arguments.

4 (a) Attempt the followings : 4

- (1) Write the purpose of `feof()`.
- (2) What the purpose of `rewind()` ?
- (3) `Calloc` allocates multiple blocks of storage, each of the same size. (True/False).
- (4) When does programmer use `#include` directive ?

(b) Answer the followings : (any two)

8

- (1) What is macro ? Explain macros with argument with example.
- (2) Explain command line arguments with example.
- (3) Explain getw( ) and putw( ) with syntax and example.

5 (a) Attempt any two from the followings :

10

- (1) Write a program to find factorial of a given number using recursion.
- (2) Design a structure student\_record to contain name, branch and total marks obtained. Write a program to read data for 10 students in a class and print on screen.
- (3) Write a program to check the number is Palindrome or Not using UDF.

(b) Attempt any two from the followings :

12

- (1) Write a program to swap the two values using pointers and UDF.
- (2) Write a program to work as a dos type command using command line argument.
- (3) Write a program that counts the number of characters and number of lines in a file.