BCA(1) 106

2018

Time : 3Hrs   *Full Marks : 80*

Candidates are required to give their answers in

their own words as far as practicable.

The questions are of equal value.

Answer any five questions in which Q. No. 1 is compulsory.

1. Choose the correct answer from the following:

    (a) The variables can be accessed by all modules in a

    program, are called

    (i)   Local variable

    (ii) Internal variables

    (iii) External variable

    (iv) Global variable

    (b) Be default, any real number in 'C' is treated as

    (i)   A float

    (ii) A double

    (iii) A long double

    (iv) Depend upon memory model that you are using

    (c) A "switch" statement is used to

    (i)   Switch between functions in a program

    (ii) Switch from one variable to another variable

(iii) To choose from multiple possibilities which may arise due to different values of a single variable

(iv) All of above

(d) The default parameter passing mechanism is

(a) Call by value

(b) Call by reference

(c) Call by value result

(d) None of above

(e) When an array is passed as an argument to a function

(i) A copy of the first element is passed

(ii) A copy of the array is passed

(iii) A reference of the array is passed

(iv) An array cannot be passed as function arguments

(f) The goto statement transfers the control to

(i) A variable

(ii) A function

(iii) A label

(iv) An operator

(g) Which of the array elements is referred by arr[5]?

(i) Fourth

(ii) Fifth

(iii) Sixth

(iv) Third

(h) In C a pointer variable to an integer can be created by the declaration

(i) int p*;

(ii) int *p;

(iii) int +p;

(iv) int $p;

2. What is Token? Explain different Tokens used in C language. Lists all rules which is to be followed by identifiers.

3. How is a string? declared and initialized? Explain with the help of an example. Explain the difference between an array and a structure.

4. (a) Differentiate between function declaration and function definition.

(b) Write a function prototype for each of these functions:

(i) Square ( ) that takes two integer arguments and returns a long value

(ii) Convert ( ) that takes a character argument and also return a character

(iii) Compare ( ) that takes two strings as arguments

(iv) Reciprocal ( ) that takes an integer argument and returns the float value.

5. (a) Write a C program to display the factorial of a number accepted from the user.

(b) Write a C program to find the length of a string.

6. Write short notes on any two of the following:

    (i)   Recursive function

    (ii)   Union

    (iii) Control structure

    (iv) Pointer

7. Differentiate any two of the following:

    (i)   Call by value and Call by reference

    (ii)   If-else and switch---case statement

    (iii) Register variable and Static variable

    (iv) Array and Function

8. How do you define constant and variables? Explain in details various types of constant in "C".

9. What is Pre-processors? Define some Pre-processors in C?

10. What is Dynamic Memory Allocation? Explain any two functions of Dynamic Memory Allocation.

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