

# NA-122

November-2019

BCA., Sem.-I

## CC-102 : Introduction to Programming Language using C (New Course)

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Answer the following :

- (1) Explain features of machine language and write difference between machine level language and assembly language. 7
- (2) Explain type casting in depth. 7

**OR**

Answer the following :

- (1) Write structure of C program and program execution steps.
- (2) Write an algorithm and draw a flowchart to find X!

(B) Attempt following : (Any **four**) 4

(1) In flowchart for termination \_\_\_\_\_ symbol is used.

- |   |   |
|---|---|
| (a)  | (b)  |
| (c)  | (d)  |

(2) Which of the following is not a character constant ?

- |         |         |
|---------|---------|
| (a) 'C' | (b) "C" |
| (c) ''  | (d) '*' |

(3) Every statement in C program ends with \_\_\_\_\_.

- (a) , (comma)
- (b) ; (Semi colon)
- (c) : (colon)
- (d) } (closing bracket)

(4) The symbol of multiline comment is \_\_\_\_\_.

- (a) /\* \*/
- (b) /\*\* \*/
- (c) \*/ \*/
- (d) // //

- (5) Which of the following is valid variable name ?
- (a) Find\_sum
  - (b) lAns
  - (c) No#1
  - (d) None of the above
- (6) \_\_\_\_\_ keyword start execution of C program.
- (a) start( )
  - (b) begin( )
  - (c) main( )
  - (d) None of the above

2. (A) Answer the following :

- (1) List different types of if statements. Explain any two in depth. 7
- (2) Explain relational and logical operators in depth. 7

**OR**

Answer the following.

- (1) Explain switch case statement with all its advantages and limitations.
- (2) List different Input Output functions. Explain any two input functions in depth.

(B) State true or false. (Any **four**)

- (1) The scanf( ) function is defined conio.h header file. 4
- (2) In C language if statement is used for decision making.
- (3) Precedence of operator determines which operator execute fast.
- (4) In ternary operator there are three operands.
- (5) The output of relational operator is either true or false.
- (6) The char data type occupies 2 bytes.

3. (A) Answer the following :

- (1) Write difference between entry controlled and exit controlled loop and explain for loop in depth. 7
- (2) What is array ? Explain different options to initialize one dimensional and two dimensional array. 7

**OR**

Answer the following.

- (1) Explain break and continue in depth.
- (2) Write advantages of loop and explain nested loop in depth.

(B) Attempt following : (Any **three**)

- (1) The do while loop executed, at least \_\_\_\_\_ number of times.
  - (a) 0
  - (b) 1
  - (c) 2
  - (d) N
- (2) \_\_\_\_\_ keyword skip the loop statements.
  - (a) break
  - (b) \continue
  - (c) goto
  - (d) exit
- (3) The array size defined with \_\_\_\_\_.
  - (a) [ ]
  - (b) ( )
  - (c) { }
  - (d) None of the above
- (4) Array index start with \_\_\_\_\_.
  - (a) -1
  - (b) 0
  - (c) 1
  - (d) Not decided
- (5) If an array is declared as `int a[4][4]`, how many elements can it store?
  - (a) 8
  - (b) 16
  - (c) 4
  - (d) 12

4. (A) Answer the following :

- (1) Explain different elements of user defined function. 7
- (2) Explain `strlen()` and `strcpy()` functions of `string.h` file. 7

**OR**

Answer the following :

- (1) Which are different categories of user defined function ? Explain any two in depth.
- (2) Explain functions used to concatenate and compare two strings from `string.h` file.

(B) Attempt following : (Any **three**)

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- (1) \_\_\_\_\_ function is defined as a function that calls itself.
- (2) The function `int fun1();` takes \_\_\_\_\_ arguments.
- (3) Each string in C ends with \_\_\_\_\_.
- (4) \_\_\_\_\_ is default storage class of all local variables.
- (5) One function called from the definition of other function is called \_\_\_\_\_