DE-114

December-2013

B.C.A. Semester - I

CC-102 : Problem Solving and 'C' Programming

Time : 3 Hours]   **[Max. Marks : 70**

1. (A) Explain Machine level language with all its limitations.   **7**

   OR

   Write features of High level language. Differentiate Assembly language and High level language.

   (B) (1) Write an algorithm to generate series : 0, 1, 1, 2, 3, 5, 8.   **4**

   (2) Draw flow chart to generate first 100 even numbers.   **3**

   OR

   (1) Write an algorithm to find reverse number of user given number.

   (2) Draw flowchart to generate series : 3, 6, 9, 12, 15.

2. (A) (1) Write note on : 'Type Casting'.   **4**

   (2) Differentiate constant and variable.   **3**

   OR

   (1) Explain the keywords : const, char.

   (2) Which are different storage classes ? Explain any one in depth.

   (B) (1) Explain Basic structure of 'C' program.   **4**

   (2) Explain logical operators in 'C' language.   **3**

   OR

   (1) Explain getchar( ) and putchar( ) functions in depth.

   (2) Explain unary operators available in 'C' language.

3. (A) Explain Switch case statement with all its benefits and limitations. **7**

OR

Explain nested if else statement with its syntax.

(B) (1) Differentiate entry controlled loop and exit controlled loop. **4**

(2) Explain nested loop with syntax. **3**

OR

(1) Explain goto statement with syntax.

(2) Differentiate break and continue.

4. (A) Write different options to initialize one dimensional array. Write steps to find sum of one dimensional array which is having five elements. **7**

OR

Write steps to find sum of two 3×3 two dimensional array.

(B) Explain strcpy( ) and strlen ( ) function from string.h header file. **7**

OR

Write steps to concate your name and surname without use string function.

5. Attempt the following questions : **14**

(1) What is Non procedural language ?

(2) Write single difference between compiler and interpreter.

(3) Define flowchart.

(4) Identifiers are _____.
   (a) C-Statements
   (b) user-defined names
   (c) reserved keywords
   (d) none of the above

(5) Which is incorrect variable name ?
   (a) int
   (b) ok
   (c) name
   (d) find_total

(6) What is the result of the expression (10/3)*3+5%3 ?

    (a) 11

    (b) 10

    (c) 8

    (d) 1

(7) What is use of #define ?

(8) Write for loop to print : 5, 10, 15, 20, 15.

(9) Find on out put :

count = 6;
while(--count > 0)
printf(count);

(10) The if else statement can be represented with which operator ?

(11) What is comment ? Write different types of comments in 'C'.

(12) Every 'C' statement ends with _____.

(13) Execution of 'C' program begins at _____.

(14) The function call strcmp ("pqr", "PQR"); returns _____.

    (a) positive number

    (b) negative number

    (c) zero

    (d) String

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