Reg. No. | | | | | | | | | |

BCACACN 102

First Semester B.C.A. Degree Examination, February/March 2023
(NEP 2020)
(2021 – 22 Batch Onwards)
PROGRAMMING IN C (DSCC)

Time : 2 Hours Max. Marks : 60

Note : *Answer* ***any six*** *questions from Part –* ***A*** *and* ***one full*** *question from* ***each*** *Unit in Part –* ***B****.*

PART – A **(6×2=12)**

1. a) Give basic structure of a C program.
   b) Correct the errors : #define Pi = 3.14;
   c) Write the equivalent 'C' expression for the equation given below :
   $A = [3b^2 + 4c^2] \div x$
   d) Write the general format of simple if statement. Give example.
   e) Specify the different ways to read a string from keyboard.
   f) What is a pointer ? How do you declare a pointer variable in C ?
   g) Give any two differences between structure and union.
   h) Differentiate actual parameters and formal parameters.

PART – B

Unit – I

2. a) What are constants ? How they are classified ? Give example for each.
   b) Explain int, float and char data types in 'C' with example. **(6+6)**

3. a) How do you read and print single character and integer in 'C' ? Give example.
   b) Explain the following tokens used in C.
      i) Keyword ii) Identifier.
   c) Explain the salient features of 'C' language. **(4+4+4)**

P.T.O.

Unit – II

4. a) Differentiate while loop and do..while loop with syntax and example.
   b) Explain the different arithmetic operators in 'C' with syntax and example. **(6+6)**

5. a) Explain switch statement with its syntax and example.
   b) Write a 'C' program to find sum of digits and reverse of a given number. Also check if it is palindrome or not. **(6+6)**

Unit – III

6. a) Explain the following functions with syntax, usage and example.
      i) strlen( )
      ii) strcpy( )
      iii) strcat( )
   b) Write a 'C' program to find minimum and maximum in a given list of 'N' numbers. **(6+6)**

7. a) List any six advantages of pointers.
   b) Explain with example how to declare and initialize one dimensional array. **(6+6)**

Unit – IV

8. a) Explain structure definition with syntax and example.
   b) Explain any two categories of user defined function. **(6+6)**

9. a) Explain function definition with syntax and example.
   b) Explain structure within a structure with an example. **(6+6)**