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

BCACAC 132

First Semester B.C.A. Degree Examination, April 2021
(Choice Based Credit System)
(2019-2020 Batch Onwards)
PROBLEM SOLVING USING C

Time : 3 Hours Max. Marks : 80

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

PART – A

1. a) Define Algorithm. List any two properties of it. **(10×2=20)**
   b) List any two rules to be followed for naming a variable.
   c) Differentiate keyword and identifier.
   d) Give the syntax of conditional operator. Give an example.
   e) Differentiate break and continue statements.
   f) How do you read and write single character in C ? Give example.
   g) What is an array ? How do you declare it ?
   h) How to declare and initialize string variable ?
   i) What do you mean by nesting of functions ? Give example.
   j) What are the different modes to open a file ?
   k) Differentiate structure and union.
   l) What is pre-processor directive ? Specify its use.

PART – B

Unit – I

2. a) Explain the primary data types available in 'C'.
   b) What do you mean by symbolic constants ? List rules apply to define it.
   c) Explain the different phases of Program Development Cycle. **(5+4+6)**

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3. a) Explain the basic symbols of Flowchart.
   b) Define constant. How they are classified ? Explain.
   c) Explain the basic structure of C program with an example. **(5+5+5)**

Unit – II

4. a) Explain printf() function with syntax and example.
   b) Explain switch statement with syntax and example.
   c) Explain 'do...while' statement with syntax and example. **(5+5+5)**

5. a) Write a note on arithmetic, logical and relational operators available in C.
   b) Explain different forms of 'if' statements.
   c) Explain 'for' statement with syntax and example. **(6+5+4)**

Unit – III

6. a) Explain one-dimensional array with the help of suitable code example.
   b) Differentiate actual parameter and formal parameter with suitable example.
   c) Explain with example any two categories of functions. **(5+5+5)**

7. a) Explain the elements of a user defined function with a general format.
   b) Explain any five string handling functions available in C.
   c) Write a note on passing arrays to functions. **(6+5+4)**

Unit – IV

8. a) What is a recursion ? Explain with example.
   b) Explain any two storage classes.
   c) Explain with code example array within structure. **(5+5+5)**

9. a) Explain with example declaring and initializing a pointer variable.
   b) Explain 'fprintf and fscanf' functions with its syntax and examples.
   c) Explain the following :
      i) Macro substitution
      ii) File Inclusion. **(5+4+6)**