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

BCACAC 109

Credit Based First Semester B.C.A. Degree Examination, Oct./Nov. 2016
(Common to All Batches)
PROGRAMMING IN C

Time : 3 Hours Max. Marks : 80

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

PART – A

(10×2=20)

1. a) What are comments ? How to write comments in C ?
   b) What are string constants ? How they differ from single character constants ?
   c) List the rules used for naming an identifier.
   d) What would be the value of x after the execution of the following statements ?

      int x, y = 10; char z = 'a'; x = y + z;

   e) Differentiate break and continue.
   f) What is an array ? Write a C statement to declare an integer array of size 100.
   g) Mention suitable string functions to do the following :
      a) To find length of the string.
      b) To copy one string to another string.
   h) Write the scope and life time of static variables.
   i) What is recursion ?
   j) Differentiate structures and unions.
   k) What is a pointer ? How to declare a pointer variable in C ?
   l) List any two file access modes with their purpose.

P.T.O.

PART – B

Unit – I

2. a) Explain the features of C program.
   b) List and explain different assignment and relational operators available in C.
   c) Explain precedence and associativity of arithmetic operators in C. **(5+5+5)**

3. a) Explain the fundamental data types of C.
   b) Explain the following with syntax and example :
      i) Conditional operators.
      ii) Increment and decrement operators.
   c) Explain printing strings and real numbers using formatted output statement. **(6+4+5)**

Unit – II

4. a) Explain switch statement with syntax and example.
   b) Explain the methods of declaring and initializing one dimensional array.
   c) Explain do while statement with syntax and example. **(5+5+5)**

5. a) Explain else if ladder with syntax and suitable example.
   b) Explain for loop with syntax and example.
   c) Explain :
      i) break statement with example.
      ii) goto statement with example. **(5+5+5)**

Unit – III

6. a) List and explain any five string handling functions with examples each.
   b) Explain function definition with syntax and example.
   c) Explain call by value and call by reference with suitable example. **(6+4+5)**

7. a) What is a string ? How to declare and initialize strings and input strings ?
   b) Explain any two categories of user-defined functions in C.
   c) Explain passing arrays to a function with suitable example. (4+6+5)

Unit – IV

8. a) What is structure ? Explain structure definition with syntax and example.
   b) Explain following file related functions :
      i) fseek()
      ii) ftell
      iii) rewind
      iv) feof()
   c) Explain the following with examples :
      i) size of operator
      ii) file inclusion directive. (5+6+4)
9. a) Explain with examples different forms of macro substitutions.
   b) Explain nested structures with suitable example.
   c) Write a note on pointers in 'C'. (7+4+4)
