Q.P. Code : 11125

First Semester B.Sc. Degree Examination,
November/December 2019

(CBCS Scheme – Freshers and Repeaters)

Computer Science

Paper CS1T – PROGRAMMING CONCEPTS USING C

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

Instructions to Candidates : Answer all Sections.

SECTION – A

I. Answer any **TEN** questions. Each question carries **2** marks : **(10 × 2 = 20)**

1. What is structured programming? Explain briefly.
2. What is an algorithm? Write its features.
3. Give any two difference between if( ) and switch statement.
4. Give any four advantages of functions.
5. What is two-dimensional array? How is it declared?
6. What are Possible Operations on strings? List them.
7. What is a pointer? With example.
8. What are local and global variables?
9. What is enumerated data type? Give example.
10. How does an append mode different from write mode?
11. What is a pre-processor directive?
12. What is a Macro? List the types of Macro.

SECTION – B

II. Answer any **FIVE** questions from the following. Each question carries **10** marks : **(5 × 10 = 50)**

13. (a) Explain the classification of software.
    (b) Explain the different data type supported by C-Programming Environment. **(5 + 5)**

14. (a) Draw a flowchart to find the roots of quadratic equations showing all possible conditions.

    (b) Write the rules for naming variable. Give one example for each rule. **(5 + 5)**

15. (a) Elaborate in detail by explaining

        (a) Print f( )

        (b) Scan f( ) functions with suitable example of 'C'-code.

    (b) Differentiate between formal and actual parameters with suitable example. **(5 + 5)**

16. (a) Write a program to find the sum of elements of two-dimensional arrays of given size n × n.

    (b) Explain the four storage classes of 'C' programming. **(5 + 5)**

17. (a) Write a program to Implement Bubble sort.

    (b) Write a program to reverse the given string. **(5 + 5)**

18. (a) Explain the nested structure and array of structures with suitable examples.

    (b) Write a 'C' program to find the factorial of n number using recursion. **(5 + 5)**

19. (a) Explain calloc( ) malloc( ) and free( ) functions with suitable example.

    (b) What are the different modes of opening a text file? Explain with example. **(5 + 5)**

20. (a) What is undefining Macros? Differentiate between Macros and Functions.

    (b) Explain the concept of user defined header files with suitable example. **(5 + 5)**
