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)

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