65121

First Semester B.C.A. Degree Examination, December 2018

(CBCS – Semester Scheme)

Computer Science

Paper I – PROBLEM SOLVING TECHNIQUES USING C

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

Instructions to Candidates : Answer all the Sections.

SECTION – A

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

1. What is Software? Mention its types.

2. Define algorithm.

3. What are the different datatypes in C?

4. Give the syntax and example for If-else statement.

5. Differentiate between break and continue.

6. What is an array? Give example.

7. What is string? Write any two string functions.

8. Differentiate between Structure and Union.

9. What is Pointer? How it is declared?

10. What is malloc( ) and calloc( )?

11. What is file? Mention two types of file.

12. What are command line arguments?

SECTION – B

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

13. (a)   Explain the structure of C Program.   **(5)**

    (b)   What are the various symbols used in designing a flowchart? Explain with an example.   **(5)**

14. (a)   Explain the types of operators in C.   **(5)**

    (b)   Explain any five mathematical library functions with example.   **(5)**

15. (a)   Explain Formatted Input/Output function in C.   **(5)**

    (b)   Explain Switch-case statement with an example.   **(5)**

16. (a)   Differentiate between while and do-while statement.   **(5)**

    (b)   Write a C program to display fibonacci series using recursive function.   **(5)**

17. (a)   Write a C program to find product of two matrix.   **(5)**

    (b)   Explain storage classes with example.   **(5)**

18. (a)   Differentiate between call-by-Value and call-by-Reference.   **(5)**

    (b)   What do you mean by structure? Explain with an example.   **(5)**

19. (a)   Explain function with arguments and with return value with an example. **(5)**

    (b)   Write a note on array of pointers.   **(5)**

20. (a)   Write a C program to copy content of one file to another file.   **(5)**

    (b)   What are macros? Explain with an example.   **(5)**

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