

Q.P. Code : 15121

**First Semester B.C.A. Degree Examination,
November/December 2019**

(CBCS Scheme – Freshers & Repeaters)

Computer Science

Paper BCA 103 T – PROBLEM SOLVING TECHNIQUES USING C

Time : 3 Hours]

[Max. Marks : 70

Instructions to Candidates : Answer all Parts.

PART – A

- I. Answer any **TEN** questions. Each question carries **2** marks : **(10 × 2 = 20)**
1. Define algorithm.
 2. What is structured programming?
 3. Explain ternary operator.
 4. Define the different types of type conversion with example.
 5. Explain break and continue.
 6. What is function prototype?
 7. Define array. How can an array be initialized?
 8. Write any four mathematical functions available in 'C'.
 9. Define pointer with example.
 10. What is enumerated data type?
 11. Write any four file functions.
 12. How does structure differ from Union?

PART – B

- II. Answer any **FIVE** questions. Each question carries **10** marks : **(5 × 10 = 50)**
13. (a) Explain the structures of 'C' program with an example. **(5)**
(b) What is software? Mention the classification of software. **(5)**

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14. (a) Explain the different data types supported by 'C'. (5)
(b) Explain arithmetic operators with an example. (5)
15. (a) Explain the different looping statements with an example. (7)
(b) What are formatted I/O functions in 'C'? (3)
16. (a) Write a C Program to display fibonacci series using recursive function (5)
(b) What is a function? Explain with an example passing of arguments to functions. (5)
17. (a) Write a C program to find the product of two matrices. (5)
(b) Explain different storage classes in 'C' language. (5)
18. (a) Explain string operations with an example. (5)
(b) Explain switch statement in 'C' with an example. (5)
19. (a) Write a note on call by value and call by reference with an example. (5)
(b) Explain command line argument. (5)
20. (a) What are preprocessor directives? (5)
(b) Explain static and dynamic memory allocation. (5)