



**DB-003-003108** Seat No. \_\_\_\_\_

**B. C. A. (Sem. I) Examination**

**March - 2022**

**CS-02 : Problem Solving Methodologies &  
Programming in C  
(Old Course)**

**Faculty Code : 003**

**Subject Code : 003108**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**Instructions :** (1) All questions carry equal marks.  
(2) Attempt any five of the following questions.

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|---|--|----|
| 1 | (a) Write a note on algorithm.   | 14 |
|   | (b) Write a note on pre-processor and file inclusion.                          |    |
| 2 | (a) Explain switch case with example.  | 14 |
|   | (b) Explain nested loop with example.  |    |
| 3 | (a) Differentiate call by value and call by reference.                         | 14 |
|   | (b) Explain recursion with example.  |    |
| 4 | (a) What is pointer ? Discuss pointer notation.                                | 14 |
|   | (b) Explain types of UDF with example.   |    |
| 5 | (a) Explain 2-D array with example.  | 14 |
|   | (b) Explain how to pass entire 1-D array in UDF with example.                  |    |
| 6 | (a) Explain nested structure with example.                                     | 14 |
|   | (b) Explain how to pass structure into UDF with example.                       |    |
| 7 | Write a program to write and read student roll number and name into text file. | 14 |

- 8 (a) Differentiate : Text V/s Binary mode. 14  
(b) Explain command line argument with example.
- 9 Explain any two file handling function with syntax and example. 14
- 10 (a) Explain logical not operator with example. 14  
(b) Explain any three symbol of flowchart.
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