$\qquad$

# Reg. No 

$\qquad$
THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 (CUCBCSS- UG)
CC17U CSC3 C03 - PROBLEM SOLVING USING C PROGRAMMING
(Computer Science - Core Course)
(2017, 2018 Admissions - Supplementary/Improvement)
Time: Three Hours
Maximum: 64 Marks

## PART A

Answer all questions. Each question carries 1 mark.

1. Define C tokens.
2. The process of combining two strings together is called $\qquad$
3. Which of the following cannot be checked in a switch-case statement?
(a) Character
(b) Integer
(c) Float
(d) enum
4. What is the value of $\mathbf{y}$, given $\mathrm{x}=6$ and $\mathrm{y}=((\mathrm{x}>10) ?(2 * x+5):(3 * x / 2))$.
5. Pick incorrect statement for the following:
(a) C supports recursion
(b) A function returns float value by default.
(c) One a function is defined, it can be called anywhere.
6. The $\qquad$ statement is used to skip a part of the statements in a loop.
7. The function $\qquad$ returns the current position of the file pointer.
8. In $\qquad$ values of actual parameters are copied to the variables.
9. What is the output of this program?
```
void main()
    {
        int }\textrm{a}=\textrm{b}=\textrm{c}=10\mathrm{ ;
        a=b=c=50;
        printf("\n %d %d %d",a,b,c);
    }
```

(a) 505050
(b) Compile Time Error
(c) 101010
(d)Three Garbage Value

## PART B

Answer all questions. Each question carries 2 marks.
10. Explain basic structure of a C program.
11. What is an array? How to declare and initialize an array?
12. What is the purpose of goto statement in C ?
13. Write any two string functions.

14 . What is a pointer?
(5 $\times 2=10$ Marks $)$

## PART C

Answer any five questions. Each question carries 5 marks.
15 . Write a program to find the roots of a quadratic equation.
16. Write a program to add two matrices.
17. Explain dynamic memory allocation.
18. What is the difference between pass by value and pass by reference?
19. Explain data types.
20. Explain switch statement with example.
21. Write a program to find the power of a number using structure.
22. What is a recursive function? Write a recursive function to find the factorial of a number?
( $5 \times 5=25$ Marks )

## PART D

Answer any two questions. Each question carries 10 marks.
23. What is an operator? Explain different types of operator.
24. What do you mean by files? Explain different file handling functions.
25. What do you mean by the function? What are the different category of function?
( $\mathbf{2} \times \mathbf{1 0}=\mathbf{2 0}$ Marks )

