D 51303 (Pages : 2) Name.....

Reg. No.....

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(CUCBCSS—UG)

Complementary Course

BCS 3C 03—PROBLEM SOLVING USING C PROGRAMMING

(2017 Admissions)

Time : Three Hours Maximum : 64 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. Name an entry controlled loop.
2. If the integer variables a and b are holding the values 11 and 4 respectively, the expression a % b produces the result ————.
3. ———— are collection of elements of the same data type.
4. char txt [20]; How many bytes are allocated by this definition ?
5. Every string ends with ————.
6. Which statement is used to skip a part of loop ?
7. Which statement is used for defining symbolic constants in C ?
8. Which is the conditional operator in C ?
9. Function declaration statements must end with a semicolon. (True/False)

(9 × 1 = 9 marks)

Part B

Answer **all** *questions.*
Each question carries 2 *marks.*

10. What are the different flow chart symbols ? Explain.
11. What are pointers ?
12. Write a program to check whether given number is divisible by 11 or not.
13. What are preprocessor directives ? Explain with example.
14. Differentiate structure and union.

(5 × 2 = 10 marks)

Turn over

Part C

Answer any **five** *questions.*
Each question carries 5 *marks.*

15. Differentiate between local and global variables with examples.
16. Write a program to find the factorial of a number using recursion.
17. Explain the different looping statements in C.
18. Write a program to find largest and second largest element in an array.
19. What do you mean by precedence of operators ? Explain.
20. Explain the various arithmetic operations on pointers.
21. Write a C program to find transpose of a matrix.
22. What are the different string functions in C ? Explain.

(5 × 5 = 25 marks)

Part D

Answer any **two** *questions.*
Each question carries 10 *marks.*

23. Briefly explain the different forms of if statement with examples.
24. Given a line of text. Write a C program to :
    (a) Find the no. of words.
    (b) Convert all word's first letter to uppercase.
25. Describe the various categories of functions with examples.

(2 × 10 = 20 marks)