

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)