D2BCS2201 39 Reg.No.....

Name: .....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023

(Regular/Improvement/Supplementary)

COMPUTER SCIENCE

GBCS2B02T: PROBLEM SOLVING USING C

Time: 2 Hours **Maximum Marks: 60**

SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 Marks)

1. What is the difference between source program and object program?
2. Describe two different ways that floating-point constant can be written.
3. Explain putchar( ) function with example
4. Write a short note on sizeof operator.
5. Why decision making statements are called control statement?
6. What is the purpose of do-while statement? Summarize the syntactic rules associated with the do-while statement.
7. Describe the structure of a function in C.
8. Define the term scope & life time of variables in functions.
9. Differentiate between an array and structure.
10. Explain the purpose of strcat function.
11. How to accessing a variable through its pointer? Explain with example.
12. Write a short note on realloc() function.

SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 Marks)

13. Describe the basic structure of C.
14. What is an identifier? Explain the rules for naming identifiers.
15. Write a C program to check whether a character entered by the user is a vowel or not by using the switch case statement.
16. Compare break and goto in terms of their functions.
17. Write a program which will read a text and count all occurrences of a particular word.
18. What are bit fields? How are bit fields defined and used? What are its advantages?
19. What are command line arguments? Explain its purpose.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. What is precedence of operators? Explain C precedence and associativity of operators.
21. What is meant by dynamic memory allocation? Describe the syntax and usage of memory allocation functions in C.

(1 x 10 = 10 Marks)