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D2BCA2301 (PAGES 2) Reg.No.....

Name: .....

SECOND SEMESTER UG DEGREE EXAMINATION, APRIL 2024

(Regular/Improvement/Supplementary)

BCA

GBCA2B02T: 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 use of global declaration section?
2. Name and describe the basic data types in C.
3. Write a note on bitwise operators in C.
4. Write a short note on getchar( ).
5. Write a program in C to display the first 10 natural numbers.
6. How is the execution of a while loop terminated?
7. Differentiate between actual and formal parameter.
8. What is recursion?
9. How is a pointer variable declared? What is the purpose of the data type included in the declaration?
10. What is pointer to pointer?
11. What is a stream? How does a stream differ from a file?
12. Differentiate between sequential file and random file.

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 Marks)

13. Explain execution of C program.
14. Explain the different types of constants available in C.
15. Describe two different ways to utilize the increment and decrement operators. How do the two methods differ?
16. What is the purpose of print f function? How is it used within a C program?
17. How one dimensional and two dimensional arrays are initialised?
18. How can you handle errors during file handling? Explain.
19. What is the purpose of the library function malloc and calloc? How do they differ?

(PTO)

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

20. Write a C program to find grade of a student using switch statement. Below table shows the grading system.

Score in subject	Grade
90-100	A
80-89	B
70-79	C
60-69	D
50-59	E
<50	F

21. Explain details about structure.

(1 x 10 = 10 Marks)