C 22050 (Pages : 2) Name.....

Reg. No.....

SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2022

B.C.A.

BCA 2B 02—PROBLEM SOLVING USING C

(2021 Admissions)

Time : Two Hours Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 24.

1. Describe the characteristics and purpose of escape sequence characters.
2. What is target variable ? Why is it important ?
3. What are the different classes of integer storages in C ? Explain each.
4. Why and when the use of ++k and k++ in different ? Explain.
5. Explain when explicit conversion is used in C ? How it works ?
6. What is short hand operator ? Explain its working in C.
7. How can we use the getchar() function to read multicharacter strings ?
8. Why do...while is executed minimum onetime? Explain with simple program.
9. Discuss different way to initial values can be assigned to a two dimensional array.
10. Explain function declaration and function definition.
11. What is mean by scope and lifetime of variables in functions ?
12. How can we declare and initialize pointers ?

(8 × 3 = 24 marks)

Turn over

Section B

Answer at least **five** *questions.*
Each question carries 5 *marks.*
All questions can be attended.
Overall Ceiling 25.

13. Explain the structure of C Program elaborating the different parts of it.
14. What is an operator ? Explain special and conditional operators with suitable example.
15. How does the control string in printf() function is differ from the control string in scanf() function ? Explain. What are the different commonly used conversation characters in printf()functions.
16. Write a program to print Fibonacci series up to a number.
17. Write a program to find out NCR using recursive function and also pass parameters.
18. Explain the concept of union and structure in C.
19. Explain with example how to do read and write from a file.

(5 × 5 = 25 marks)

Section C

Answer any **one** *question.*
The question carries 11 *marks.*

20. (a) Explain different decision-making statements in C with suitable programs.
    (b) Write a C program to find the average of odd digits from an integer number.
21. (a) Write a structure program to find out the number of days in between two days. The date format is dd/mm/yyyy. Entered the date through keyboard. Use user defined functions and pass parameters. Not use any library functions. And check all validations.
    (b) What are the different categories of functions ? Explain each with examples

(1 × 11 = 11 marks)