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?

 $(8 \times 3 = 24 \text{ marks})$

Turn over

C 22050

Section B

2

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.

 $(5 \times 5 = 25 \text{ marks})$

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

 $(1 \times 11 = 11 \text{ marks})$