TB221560V	Reg. No :

# Name :....

#### BCA DEGREE (C.B.C.S.) EXAMINATION, NOVEMBER 2022

(2022 Admissions (regular) 2021 Admissions (Improvement / Supplementary), 2020, 2019, 2018, Admissions Supplementary)

# SEMESTER I - CORE COURSE (CLOUD TECHNOLOGY AND INFORMATION SECURITY MANAGEMENT) BCA1B02B18 - PROGRAMMING IN C

Time: 3 Hours Maximum Marks: 80

#### Part A

### I. Answer any Ten questions. Each question carries 2 marks

(10x2=20)

- 1. Define computer program.
- 2. Define translators. Give 2 eg for translators.
- 3. Identify the differences between one pass and two pass assembler.
- 4. Define Unary, binary and ternary operators in C.
- 5. How can we create an infinite loop in C?
- 6. Explain strcmp().
- 7. Explain toupper() with an example.
- 8. Examine a function prototype.
- 9. Define union.
- 10. Tell about pointers in C. Discuss how do you initialize it.
- 11. What is the difference between declaring a header file with < > and " "?
- 12. Differentiate getc() and getw().

#### Part B

# II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

- 13. State the purpose of an algorithm. Write an algorithm to swap two numbers.
- 14. Write an algorithm to check if input character is a vowel or not. Draw a flow chart for the same.
- 15. Explain the operators in 'C' programming.
- 16. Discuss about Data Types in C.
- 17. Write a program to check if two strings are equal or not.
- 18. State the differences between break, continue and exit().
- 19. Explain the concept of structure within structures.
- 20. Explain the concept of array of structures in C.
- 21. Write a 'C' program to read the contents of a file using 'fgets'.

### Part C

## III. Answer any Two questions. Each question carries 15 marks

(2x15=30)

- 22. Discuss about looping statements in C. Explain the working of While loop. Write a program to check whether the given number is armstrong or not using while loop.
- 23. Discuss about function. Briefly explain the category of functions with suitable examples.

- 24. Write a program using structure to read and display details of 'n' employees. The details should include employee name, age, phone number and salary. The net salary is calculated as salary=basic pay+ allowance- deductions.
- 25. Write a short note on C preprocessors.