



QP CODE: 25019761 Reg No :

Name :

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

B.Sc Electronics Model III

Core Course - EL4CRT10 - PROGRAMMING IN C

2017 Admission Onwards

B1D11574

Time: 3 Hours Max. Marks: 80

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Explain what is a flowchart.
- 2. List two example functions each for input and output.
- 3. Explain the basic difference between the while and do- while loops.
- 4. Explain the syntax of for loop.
- 5. What is a nested loop?
- 6. What is an array? How does it differ from an ordinary variable?
- 7. Discuss two methods for string input.
- 8. What is a structure C Programming?
- 9. What is an union in C programming?
- 10. Explain the concept of pointers.
- 11. What is meant by scope of variable?
- 12. Explain realloc() function.

 $(10 \times 2 = 20)$

Part B

Answer any **six** questions.

Each question carries 5 marks.

13. Distinguish between long, short and unsigned declarations.



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- 14. Explain the bitwise operators in C programming language.
- 15. Write a program to check the given number is odd or even
- Compare break, continue and goto statements by bringing out the differences and similarities.
- 17. How to declare and initialize a two-dimensional array?
- 18. Explain the syntax of function
- 19. Explain the useage of pointer to structure variables in detail.
- 20. Write a C program to swap two numbers using call by reference method.
- 21. Explain different preprocessor directives in C.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Draw the flow chart for finding the roots in three cases of a quadratic equation.
- 23. Explain the syntax of switch statement. Write a program to make a simple calculator program using switch statement
- 24. Write a program that uses a function to find GCD of two numbers n and m. Also draw the flowchart.
- 25. (a).Explain array of structures. (b) Write a program using a structure to store the name, department, employee number and salary of an employee in a company. Illustrate how salary can be displayed as using using a function.

 $(2 \times 15 = 30)$

