Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions.

- 1. Write a note on character set of C.
- 2. List the logical operators in C.
- 3. Write a note on Sqrt() function.
- 4. What is the use of printf() function? Give an example.
- 5. What is the purpose of a Switch statement?
- 6. List down any two uses of functions.
- 7. What is Recursion?
- 8. How to initialize the values in an Array? Give an example.
- 9. Define: Structures.
- 10. What are the bitwise operators in C?
- 11. List down any two advantages of pointers.
- 12. Define: Sequential file.

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

Answer any FIVE questions.

- 13. What are the basic data types in C? Explain them with examples.
- 14. Explain about various expressions in C with examples.
- 15. Write a C program to find the biggest number among three given numbers.
- 16. Explain the usage of following statements with examples.
 - (a) while
 - (b) break
- 17. Write a C program to find the arithmetic mean of n values using a function.
- 18. Discuss briefly about passing Arrays to functions with examples.
- 19. Explain about arrays of pointers with an example.

Answer any THREE questions.

- 20. Explain about various data input and output functions with suitable examples.
- 21. Write a C program to find the sum of the digits of any given positive integer. (eg. when n = 345, then sum of digits 3 + 4 + 5 = 12).
- 22. Describe in detail various storage classes in C with examples.
- 23. Write a C program to perform addition of two matrices.
- 24. Explain about creation and processing of files in C.