50401/SAE1A

Time: Three hours Maximum: 75 marks

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

Answer any TEN questions.

- 1. What are constants?
- 2. How variables are declared in C?
- 3. What is the difference between = and == operator?
- 4. What is branching?
- 5. What is the purpose of break statement?
- 6. What is void' data type?
- 7. What is a local variable?
- 8. Name the four storage classes in C.
- 9. What is a string?
- 10. What is union?
- 11. What is indirection operator?
- 12. What is a file?

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

Answer any FIVE questions.

- 13. Explain the various data types in C.
- 14. Explain if... else statement with its syntax.
- 15. Write a program to check whether the given integer is prime or not.
- 16. What is recursion? Write a recursive program to find the factorial value of an integer.
- 17. What is a structure? How structure members are accessed in C? Explain.
- 18. Write a note on bitwise operators.
- 19. Explain the various operations on pointers in C

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 20. List and explain any ten commonly used library functions in C.
- 21. Describe the three looping statements in C with examples.

2

50401/SAE1A

- 22. Explain user defined functions in ${\bf C}$ with examples.
- 23. Write a C program to find the multiplication of two matrices.
- 24. (a) Write a note on call by reference. (5)
 - (b) Write a C program to copy the content of one file to another file. (5)