

519

Register No.:

April 2024

Time - Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.]

PART - A

1. How do you declare variables and constants?
2. Differentiate Keywords from identifiers.
3. Write the syntax for strcpy() function.
4. What is Recursion function?
5. Write any two differences between Union and Structure.
6. How do you Initialize pointer?
7. What are the queue operations?
8. Define circular queue.
9. Define singly linked list.
10. What is bubble sort?

[Turn over.....

PART – B

11. (a) (i) Explain about the program development cycle. (7)
(ii) Explain about the Unformatted I/O statements. (7)

(Or)

- (b) Explain about Arithmetic, Logical and Relational C operators.

12. (a) Explain about if else and nested if else statements with their syntaxes.

(Or)

- (b) Explain about Two dimensional arrays and write a program to perform matrix addition.

13. (a) Explain about structure and arrays within structure concepts with examples.

(Or)

- (b) (i) Explain about command line arguments. (7)
(ii) Explain about malloc() and free() functions. (7)

14. (a) Explain Inserting, Searching and Sorting operations on data structure.

(Or)

- (b) Write an algorithm to convert infix expression to postfix expression. Explain its steps with an example.

15. (a) Explain about In-order traversal, Pre-order traversal and Post-order traversal with their examples.

(Or)

- (b) Write a C program for searching a number using binary search and explain its steps with an example.
