Register No.:	

438

April 2023

<u>Time - Three hours</u> (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. What are the features of C language?
- 2. What is meant by formatted input statement?
- 3. How to declare and initialize an one dimensional array?
- 4. Write about strlen() function in C with example.
- 5. Define structure with syntax.
- 6. Write about realloc() and free() functions.
- 7. What is meant by primitive data structure?
- 8. Define queues.
- 9. Define circular linked list.
- 10. What is meant by sequential list?

[Turn over.....

PART - B

11. (a) Explain character constants and string constants.

(Or)

- (b) What are the unformatted i/o functions in C ? Explain with an example.
- **12.** (a) Explain One dimensional and Two dimensional array processing with an example.

(Or)

- (b) Discuss about various Math functions with example.
- 13. (a) Define union declaration and initialization with an example.

(Or)

- (b) Explain the different functions used in dynamic memory allocation with example.
- 14. (a) How to represent an array in queue? Explain with an example.

(Or)

- (b) (i) Discuss elementary data structure. (7)
 - (ii) Discuss the operations on data structure. (7)
- 15. (a) Explain about sorting technique with examples.

(Or)

(b) Write a C program for searching a number using binary search.
