Chapter 3 Questions

1. Name the data structure where memory allocation is done only at the time of execution.
2. Write an algorithm to add new data item into a stack.
3. What is data structure? How are they classified?
4. Queue follows .....principle
5. How does stack overflow and underflow occurs?
6. Write a procedure to implement traversal operation in a linked list.
7. Attempting to insert in an already full stack leads to .....
8. Explain how push operations is done in a stack.
9. Linked list do not have the problem of overflow. Discuss?
10. Name the data structure that follows LIFO principle.
    (a) stack (b) queue (c) array (d) linked list
11. Write an algorithm to perform insertion operation in a Queue.
12. Match the following:

A	B	C
1. stack	i. Front	a. Inserting a new item
2. Queue	ii. Push	b. Elements are accessed by specifying its position.
3. Array	iii. Start	c. Contains the address of the first node.
4. Linked List	iv. Subscript	d. Removing an item.

13. Write down the full form of FIFO and LIFO.
14. People waiting in a cinema theatre counter is an example for.....
15. A link list is a linear collection of data element is called.....
16. Placing glasses one above another can be considered similar to .....data structure.
17. Write a short note on circular queue.
18. Prepare a short notes about all the operations associated with data structure.
19. A linked list containing all the names of students in your class is to be created. Write its C++ structure to define the node.
20. Write a short notes about queue?
21. Define push and pop operation.
22. Write the algorithm to add an item in to a queue which is not empty?
23. Explain about the operations performed on stack data structure.