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BACHELOR OF COMPUTER APPLICATION (SEMESTER III) INTERNAL EXAMINATION 2025
US03MABCA01 : FUNDAMENTALS OF DATA STRUCTURES (QUIZ)

Date: 23/09/2025 Tuesday

Time: 20 Minutes

Marks: 15

Q :1 Attempt following questions.

1. A _____ is a linear data structure that follows the **First In First Out (FIFO)** principle.
2. A data structure where each element points to the next is called a _____.
3. _____ design technique is used for Quick Sort.
4. The _____ data structure uses LIFO (Last In First Out) principle.
5. A _____ is a collection of nodes connected in a non-linear fashion.
6. A circular linked list's last node points to the _____ node.
7. The process of visiting each node in a tree exactly once is called _____.
8. Leaf node is known as _____ node.
9. Queues allow insertion and deletion from both ends
True or False: _____
10. In a singly linked list, you can traverse in both directions.
True or False: _____
11. Forest is a set of disjoint trees.
True or False : _____
12. A stack overflow occurs when you try to remove an item from an empty stack.
True or False: _____
13. A leaf node has exactly one child.
True or False: _____
14. The preorder traversal visits nodes in the order: root → left → right.
True or False: _____
15. A linked list can be used to implement stacks and queues.
True or False: _____

