

1.

**Which is incorrect statement about the given case :
Linear Search Algorithm is applied when-**

- A. State of array is unknown.**
- B. When it is expected conclusion can be given always after $n/2$ iterations.**
- C. Elements are unordered.**
- D. Count of no. of elements in collection are less.**

Answer: B

2.

An array of first n even numbers has been used in an arithmetic operation.

However, due to code mismanagement one element of the array has been compromised and goes missing. In order to get the missing element, minimum time complexity of the approach could be

- A. $O(n^2)$**
- B. $O(n)$**
- C. $O(\log n^2)$**
- D. $O(n \log n)$**

Answer: B

3.

What is incorrect about the sorting algorithm which can be implemented recursively?

- A. Follows divide and conquer algorithm.**
- B. Only Merge Sort and Quick Sort can be implemented recursively.**
- C. They are better in terms of time and space complexity if there are less no. of elements.**

D. Quick sort and Merge sort can be implemented when large volume of data set is available.

Answer: C

4.

Choose incorrect statement about binary search algorithm:

- A. Recurrence for binary search is $T(n) = T(n/2) + \theta(1)$**
- B. Divide and conquer algorithm gives the time complexity $O(n \log n)$**
- C. Space complexity for binary search tree is algorithm is $O(1)$**
- D. Binary search can only be used in sorted order**

Answer:A

5.

In order to use quick sort for sorting Singly Linked List Choose the correct statement about the approach:

- A. QuickSort Requires sequential forward access to elements, which is possible only in Singly LinkedList.**
- B. Quick sort can be applied only on singly linked list but can not be implemented on array.**
- C. It is not suggested to use MergeSort more than QuickSort.**
- D. QuickSort Requires alot of random access to elements, which isn't constant in LinkedLists, thus it is avoided when sorting LinkedLists.**

Answer:D