1.

Which of the method is used to access the elements of the array?

A. Sequentailly and Randomly
B. Exponentially
C. Logarathmically
D. None of these

Answer:A

2.

Choose correct matching pair about following algorithms:

1. Worst case complexity of Linear Search - O(n)
2. Average case complexity of Bubble Sort - θ(n)
3. Add Last in Singly Circular LinkedList implemented using head and tail O(n)

A. Only 1
B. Only 3
C. Both 1 & 3
D. All matched

Answer:A

3.

Suppose unsorted array elements are:
57 11 24 9 34 24*
After applying specific sorting algorithm we have sorted list as : 9 11 24 24* 34 57
Then such sorting algorithm can be

A. Selection Sort
B. Stable Sort
C. A & B
D. Unstable Sort

Answer: C

4.

Suppose you have the following sorted list [3, 5, 6, 8, 11, 12, 14, 15, 17, 18] and are using the recursive binary search algorithm. What will be sequence of comparisons used to find the key 8.

A. 11 5 6 8
B. 12 6 11 8
C. 5 3 6 8
D. 11 6 5 8

Answer: A

5.

Which is incorrect statement from below:

A. When the input size is reduced by half, maybe when iterating, handling recursion, or whatsoever, it is a logarithmic time complexity (O(n)).
B. When you have a single loop within your algorithm, it is linear time complexity (O(n)).
C. When you have nested loops within your algorithm, meaning a loop in a loop, it is quadratic time complexity (O(n^2)).
D. When the growth rate doubles with each addition to the input, it is exponential time complexity (O2^n).

Answer: A