1.
In a linear search algorithm, worst case occures:

A. If the key element is exist at first position in the list.

B. If the key element is exist at last position in the list.

C. If the key element does not exist in the list.

D. If the key element either exist at last position or does not exist in the list.

Answer: D

2.
Best case time complexity of a binary search algorithm is.....

A. O(1)
B. Big Omega(1)
C. Big Theta(1)
D. Big Omega(log n)

Answer: B

3.
What is an average case time complexity of linear search algorithm?

A. O(n/2)
B. O(n)
C. Both A & B
D. None of the above
Answer: B

4.
What is an asymptotic lower bound for binary search algorithm?

A. Big Omega(n)
B. Big Omega(log n)
C. Big Theta(log n)
D. Big Theta(n)

Answer: B

5.
Which of the following algorithm cannot be applied on a linked list data structure?

A. Linear Search
B. Selection Sort
C. Bubble Sort
D. Binary Search

Answer: D

6.
Which of the following sorting algorithm is an efficient on linked list data structure?

A. Selection Sort
B. Heap Sort
C. Merge Sort
D. Quick Sort
E. None of the above

Answer: C

7.
Which sorting algorithm is not inplace?

A. Selection Sort
B. Insertion Sort
C. Merge Sort
D. Quick Sort

Answer: C

8.
Which of the following sorting algorithm works efficiently for already sorted input sequence?

A. Selection Sort
B. Insertion Sort
C. Bubble Sort
D. Merge Sort

Answer: B

9.
In which sorting algorithm elements which are at consecutive positions gets compared?

A. Selection Sort
B. Bubble Sort
C. Insertion Sort
D. Merge Sort

Answer: B

10.
Which of the following algorithm do not follows divide-and-conquer stratergy?

A. Merge Sort
B. Quick Sort
C. Insersion Sort
D. Binary Search

Answer: C

11.
In which of the following sorting algorithm magnitudes of time complexities in all cases is same?

A. Selection Sort
B. Insertion Sort
C. Quick Sort
D. Merge Sort
E. Both A & D

Answer: E

12.
_____ algorithm is an efficient algorithm to sort smaller input size array.

A. Quick Sort
B. Merge Sort
C. Insersion Sort
D. Bubble Sort

Answer: C

13.
In binary search algorithm after every iteration search space is reduced by

A. n
B. n-1
C. n/2
D. 2n

Answer: C

14.
On which of the following data structure searching operation cannot be applied

A. Binary Search Tree
B. Graph
C. Hash Table
D. Queue

Answer: D

15.
_____ algorithm cannot be applied on a linked list

A. Merge Sort
B. Quick Sort
C. Insertion Sort
D. Selection Sort

Answer: B