**Question 1**

The worst case occurred in the linear search algorithm when

The element in the middle of an array

Item present in the last

Item present in the starting

Item has maximum value

**Explanation:**if the element situated at the end of the array so that it takes maximum time to search for that  element.

**Question 2**

 Average case occurs in the linear search when

The element is in the middle of an array

Item present in the last

Item present in the starting

Item has maximum value

**Explanation:**When the element situated at the middle of the array so it takes average time neither best case or worst case.

**Question 3**

Binary search algorithm can’t be applied to

Pointed array

Sorted binary tree

Unsorted linear array

Sorted linked list

You cannot use a binary search on an unsorted list. Your best bet is to probably iterate over the list’s items until you find the element you are looking for, an O(n) operation, i.e. do linear search

**Question 4**

Time complexity of a linear search algorithm

O(log n)

O(n^2)

O(n)

O(n log n)

**Explanation:**In linear search every element is compared by searching element till the last element so it takes O(n) time.

**Question 5**

Finding the location of a given element from the collection of item is called as

Searching

Sorting

Mining

Discovering

**Explanation:**When we are searching for a given element and want to find their position, it means we are doing searching.

**Question 6**

Search in which record is checked and read for desired items in file linearly is classified as

Combinational search

Quadratic search

Linear research

Linear search

**Explanation:**If the record is checked linearly , it means we use linear search algorithm to search desire element.

**Question 7**

The number of comparison done by the sequential search is

(N/2)+1

(N+1)/2

(N+2)/2

(N-1)/2

**Question 8**

What is the complexity of the binary search ?

O(1)

12.05%

O(n)

21.14%

O(log2 N)

O(n log n)

**Explanation:**binary search work on the sorted array so it compares the middle index of element, so it takes less time

**Question 9**

which of the following searching  algorithms work on the divide and conquer ?

Binary search

Linear search

Sequential Search

All of the above

**Answer :: (A)**  
  
**EXPLANATION ::**  
  
Binary Search Algorithm works on the principle of Divide and Conquer as we divide the search space into half in each iteration.

Show Graph

**Question 10**

What is the total number of the comparison done in the binary search

n

n^2

n+1

log(N+1)

**54.97%**

**Explanation:**It takes very less time, if there are 6 element so it will take Log(6+1) that is 0.845098.