Correct Answer

Partially Correct

Incorrect Answer

1

What is the worst case for linear search?

Your Answer

O(n)

Correct Answer

O(n)

Explanation

None.

2

Stack is also called as:

Your Answer

Last in First out

Correct Answer

Last in First out

Explanation

None.

3

Which of the following sorting algorithms has the lowest worst-case complexity?

Your Answer

Merge Sort

Correct Answer

Merge Sort

Explanation

None.

4

Which of the following algorithms is not feasible to implement in a linked list?

Your Answer

Binary search

Correct Answer

Binary search

Explanation

None.

5

\_\_\_\_\_\_ is a very useful in situation when data have to stored and then retrieved in reverse order.

Your Answer

Stack

Correct Answer

Stack

Explanation

None.

6

Which of the following is not an advantage of optimised bubble sort over other sorting techniques in case of sorted elements?

Your Answer

Detects whether the input is already sorted

Correct Answer

Detects whether the input is already sorted

Explanation

None.

7

Which searching can be performed iteratively ?

Your Answer

Binary Search

Correct Answer

Both

Explanation

None.

8

Which of the following statements is true?

Your Answer

Recursion uses more memory compared to iteration

Correct Answer

Recursion uses more memory compared to iteration

Explanation

None.

9

Which Data Structure is mainly used for implementing the recursive algorithm?

Your Answer

Stack

Correct Answer

Stack

Explanation

None.

10

When using this technique, we divide a problem into sub problems. When the solution to each sub problem is ready, we 'combine' the results from the sub problems to solve the main problem.

Your Answer

Divide and Conquer Technique

Correct Answer

Divide and Conquer Technique

Explanation

None.

11

What is the base case for the following code? void my\_recursive\_function(int n) { if(n == 0) return; printf("%d ",n); my\_recursive\_function(n-1); } int main() { my\_recursive\_function(10); return 0; }

Your Answer

if(n == 0)

Correct Answer

if(n == 0)

Explanation

None.

12

Insertion of an element at the middle of a linked list requires the modification of how many pointers?

Your Answer

2

Correct Answer

2

Explanation

None.

13

Which of the following are applications of linked lists?

Your Answer

All of the above

Correct Answer

All of the above

Explanation

None.

14

Which of the following is false about a doubly linked list?

Your Answer

Implementing a doubly linked list is easier than singly linked list

Correct Answer

Implementing a doubly linked list is easier than singly linked list

Explanation

None.

15

Which of the following operations is performed more efficiently by doubly linked list than by singly linked list?

Your Answer

Deleting a node whose location in given

Correct Answer

Deleting a node whose location in given

Explanation

None.

16

Which algorithm is adequate for searching through small arrays.

Your Answer

binary search

Correct Answer

linear search

Explanation

None.

17

We have given an array which is sorted or almost sorted? Which of the following sorting algorithms in its typical implementation gives the best performance?

Your Answer

Insertion Sort

Correct Answer

Insertion Sort

Explanation

None.

18

\_\_\_\_\_\_ is not component of data structures.

Your Answer

None of the above

Correct Answer

None of the above

Explanation

None.

19

What is the advantage of a linear search?

Your Answer

Simplicity

Correct Answer

Simplicity

Explanation

None.

20

Which of the following can be done with LinkedList?

Your Answer

Implementation of stack and Queues

Correct Answer

All of the above

Correct Answer

Partially Correct

Incorrect Answer

21

In recursion the condition after which the function will stop calling itself is

Your Answer

Base condition

Correct Answer

Base condition

Explanation

None.

22

Number of comparisons required for an unsuccessful search of an element in a sequential search in the input of N length is

Your Answer

(N+1)/2

Correct Answer

N

Explanation

None.

23

Recursion is similar to which of the following?

Your Answer

Loop

Correct Answer

Loop

Explanation

None.

24

The given array is arr = {1, 2, 4, 3}. Bubble sort is used to sort the array elements. How many iterations will be done to sort the array?

Your Answer

4

Correct Answer

4

Explanation

None.

25

Doubly linked list require more space than singly linked list?

Your Answer

True

Correct Answer

True

Explanation

None.

26

The complexity of the sorting algorithm measures the …… as a function of the number n of items to be sorter.

Your Answer

running time

Correct Answer

running time

Explanation

None.

27

……… is rearranging pairs of elements which are out of order, until no such pairs remain.

Your Answer

Exchange Sort

Correct Answer

Exchange Sort

Explanation

None.

28

What does the following recursive code do? void my\_recursive\_function(int n) { if(n == 0) return; my\_recursive\_function(n-1); printf("%d ",n); } int main() { my\_recursive\_function(10); return 0; }

Your Answer

Prints the numbers from 1 to 10

Correct Answer

Prints the numbers from 1 to 10

Explanation

None.

29

Which of the following is true about merge sort?

Your Answer

All of the above.

Correct Answer

All of the above.

Explanation

None.

30

A variant of linked list in which last node of the list points to the first node of the list is?

Your Answer

Circular linked list

Correct Answer

Circular linked list

Explanation

None.