Started on	Tuesday, 12 March 2024, 9:38 AM
State	Finished
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Time taken	7 mins 42 secs
Grade	**14.50** out of 18.00 (**81**%)

Question **1**

Incorrect

Mark 0.00 out of 1.00

Select all those that are not non linear data structure from the given options.

- [x] a. Linked List ✖
- [ ] b. Tree
- [ ] c. Graph
- [x] d. Array ✖

Your answer is incorrect.

The correct answers are:
Graph,

Tree

Question **2**

Correct

Mark 1.00 out of 1.00

Search complexity of Binary search is _____.

- ( ) a. O(nlog n)
- ( ) b. O(1)
- ( ) c. None of these
- ( ) d. O(n^1)
- (•) e. O(log n) ✔

Your answer is correct.

The correct answer is:
O(log n)

Question **3**

Incorrect

Mark 0.00 out of 1.00

Binary search algorithm cannot be applied to _____.

- a. Pointer array
- b. sorted linked list ✖
- c. sorted linear array
- d. None of these
- e. sorted binary trees

Your answer is incorrect.

The correct answer is: Pointer array

Question **4**

Correct

Mark 1.00 out of 1.00

How much memory does a boolean variable occupy?

- a. 1 Byte
- b. None of these
- c. 2 Byte
- d. 1 Bit ✔
- e. 2 Bits

Your answer is correct.

The correct answer is:
1 Bit

Question **5**

Correct

Mark 1.00 out of 1.00

Consider the student records of your class sorted in student id order. How much time it will take to search a student name with student id x.

- a. $O(n)$
- b. $O(logn)$ ✔
- c. $O(1)$
- d. $O(loglogn)$

Your answer is correct.

The correct answer is:

Question **6**

Correct

Mark 1.00 out of 1.00

Time Complexity of obtaining n rectangles by folding paper once in each operation is?

- a. O(log n) ✔
- b. O(1)
- c. O(n^1)
- d. None of these
- e. O(nlog n)

Your answer is correct.

The correct answer is:
O(log n)

Question **7**

Partially correct

Mark 0.50 out of 1.00

Which of the following statements is/are not correct about Garbage Collection in JAVA?

- a. Process of reclaiming the runtime used memory by destroying the unused objects.
- b. Removes referenced objects from heap memory. ✔
- c. It makes memory management efficient.
- d. It is an automatic process.

Your answer is partially correct.

You have correctly selected 1.
The correct answers are:
Removes referenced objects from heap memory.,

Process of reclaiming the runtime used memory by destroying the unused objects.

Question **8**

Correct

Mark 1.00 out of 1.00

Which of the following is/are not correct?

- a. 20 bits are needed to address any single word in memory if the computer has 8 MB of memory and each word in this computer is 8 bytes.
- b. The operand (s) specifies the type of operation to be performed on the opcode. ✔
- c. Each computer instruction consists of sixteen bits divided into four 4-bit fields.
- d. The total number of uniquely identifiable locations in memory is called the address space.

Your answer is correct.

The correct answer is:
The operand (s) specifies the type of operation to be performed on the opcode.

Question **9**

Correct

Mark 1.00 out of 1.00

Which of the following kind of function represent running time of an algorithm?

- (●) a. Increasing function ✔
- ( ) b. Decreasing function
- ( ) c. Both (a) and (b)
- ( ) d. None (a) and (b)

Your answer is correct.

The correct answer is:
Increasing function

Question **10**

Correct

Mark 1.00 out of 1.00

Which of the following are linear data structures?

- ( ) a. Linked List
- (●) b. All of these ✔
- ( ) c. Queue
- ( ) d. Stack
- ( ) e. Array

Your answer is correct.

The correct answer is:
All of these

Question **11**

Correct

Mark 1.00 out of 1.00

What does Big Oh notation represents?

- (●) a. Maximum time required to run a program ✔
- ( ) b. Minimum time required to run a program.
- ( ) c. Average time required to run a program
- ( ) d. None of the above.
- ( ) e. All of these

Your answer is correct.

The correct answer is:
Maximum time required to run a program

Question **12**

Correct

Mark 1.00 out of 1.00

In Java the data type ***char*** is commonly

- a. 8-bit Unicode character
- b. 16-bit Unicode character ✔
- c. 32-bit Unicode character
- d. 64-bit Unicode character
- e. None of these

Your answer is correct.

The correct answer is:
16-bit Unicode character

Question **13**

Correct

Mark 1.00 out of 1.00

Given an array *s = {"Gujrat", "Odisha", "Kashmir", "Tamilnadu"}*, what shall be output of the code fragment *System.out.println("s = " + Arrays.toString(s));*

- a. s = [GujratOdishaKashmirTamilnadu]
- b. s = [G, O, K, T]
- c. s = [Gujrat, Odisha, Kashmir, Tamilnadu] ✔
- d. s = [GOKT]

Your answer is correct.

The correct answer is:
s = [Gujrat, Odisha, Kashmir, Tamilnadu]

Question **14**

Not answered

Marked out of 1.00

What is the asymptotic relation between functions $f(n) = \sqrt{n}$ and $g(n) = (\log n)^7$?

- a. $f(n) = \Omega(g(n))$
- b. $f(n) = O(g(n))$
- c. $f(n) = \Theta(g(n))$
- d. None of these

Your answer is incorrect.

The correct answer is:
$f(n) = \Omega(g(n))$

Question **15**

Correct

Mark 1.00 out of 1.00

Which of the following asymptotic relation is an equivalence relation?

- a. Ω
- b. O
- c. ω
- d. Θ ✔
- e. All of these

Your answer is correct.

The correct answer is:
Θ

Question **16**

Correct

Mark 1.00 out of 1.00

If the complexity of an algorithm is defined as $O(n^2)$, then out of the following notations, which can be used?

- a. $O(n^3)$ ✔
- b. $O(n^1)$
- c. O(log n)
- d. $O(n^4)$ ✔

Your answer is correct.

The correct answers are: $O(n^3)$,
$O(n^4)$

Question **17**

Correct

Mark 1.00 out of 1.00

Primitive data types are passed by which of the following in Java.

- a. Both call by value and reference
- b. The variable's pointer is passed
- c. Pass by Value ✔
- d. Pass by reference

Your answer is correct.

The correct answer is:
Pass by Value

Question **18**

Correct

Mark 1.00 out of 1.00

String object in java is immutable?

Select one:

- True ✔
- False

The correct answer is 'True'.

◄ Array (New)

Jump to...

LinkedList (New) ►