Question 1

Not yet answered

Marked out of 1.00

Given an instance of a Stream, s, and a Collection, c, which are valid ways of creating a

parallel stream? (Choose all that apply.)

Select one or more:

- [x] **a. c.parallelStream()**
- [ ] **b. new ParallelStream(c)**
- [x] **c. s.parallelStream()**
- [ ] **d. new ParallelStream(s)**
- [x] **e. c.parallel()**
- [x] **f. s.parallel()**

Question 2

Not yet answered

Marked out of 1.00

Which of the following statements about the Callable call() and Runnable run() methods are correct? (Choose all that apply.)

Select one or more:

- [ ] **a. Callable can throw a checked exception.**
- [ ] **b. Both can throw unchecked exceptions.**
- [ ] **c. Both can be implemented with lambda expressions.**
- [ ] **d. Callable returns a generic type.**
- [ ] **e. Callable takes a generic method argument.**
- [ ] **f. Both methods return void.**
- [ ] **g. Runnable returns a generic type.**

Question 3

Not yet answered

Marked out of 1.00

Which lines need to be changed to make the code compile? (Choose all that apply.)

```
ExecutorService service = Executors.newSingleThreadScheduledExecutor();
service.scheduleWithFixedDelay(() -> { // w1
System.out.println("Open Zoo");
return null; // w2
}, 0, 1, TimeUnit.MINUTES);
Future<?> result = service.submit(() -> System.out.println("Wake Staff")); // w3
System.out.println(result.get()); // w4
```

Select one or more:

- ☐ **a. Line w3**
- ☐ **b. It compiles but throws an exception at runtime.**
- ☐ **c. Line w1**
- ☐ **d. Line w4**
- ☐ **e. Line w2**

Question **4**

Not yet answered

Marked out of 1.00

What is the result of executing the following application? (Choose all that apply.)

```
import java.util.concurrent.*;
import java.util.stream.*;
public class PrintConstants {
public static void main(String[] args) {
ExecutorService service = Executors.newScheduledThreadPool(10);
DoubleStream.of(3.14159,2.71828) // b1
.forEach(c -> service.submit( // b2
() -> System.out.println(10*c))); // b3
service.execute(() -> System.out.println("Printed")); // b4
}
}
```

Select one or more:

- ☐ **a. It compiles but throws an exception at runtime.**
- ☐ **b. It compiles but the output cannot be determined ahead of time.**
- ☐ **c. The code will not compile because of line b1.**
- ☐ **d. The code will not compile because of line b4.**
- ☐ **e. It compiles but waits forever at runtime.**
- ☐ **f. The code will not compile because of line b2.**
- ☐ **g. It compiles and outputs the two numbers, followed by Printed.**
- ☐ **h. The code will not compile because of line b3.**

Question **5**

Not yet answered

Marked out of 1.00

Which of the following are valid Callable expressions? (Choose all that apply.)

Select one or more:

- ☐ **a. a -> {return 10;}**
- ☐ **b. () -> {String s = "";}**
- ☐ **c. () -> {System.out.println("Giraffe"); return 10;}**
- ☐ **d. (int count) -> count+1**
- ☐ **e. () -> {return null}**
- ☐ **f. () -> "The" + "Zoo"**
- ☐ **g. () -> 5**

Question 6

Not yet answered

Marked out of 1.00

Consider a hash table of size seven, with starting index zero, and a hash function (3x + 4)mod7. Assuming the hash table is initially empty, which of the following is the contents of the table when the sequence 1, 3, 8, 10 is inserted into the table using closed hashing?

Note that '_' denotes an empty location in the table.

Select one or more:

- **a. 1, _, _, _, _, _,3**
- **b. 1, 8, 10, _, _, _, 3**
- **c. 8, _, _, _, _, _, 10**
- **d. 1, 10, 8, _, _, _, 3**

Question 7

Not yet answered

Marked out of 1.00

What will be the cipher text produced by the following cipher function for the plain text ISRO with key k =7. [Consider 'A' = 0, 'B' = 1, ...'Z' = 25]. Ck(M) = (kM + 13) mod 26

Select one or more:

- **a. GQPM**
- **b. QIBG**
- **c. RJCH**
- **d. XPIN**

Question 8

Not yet answered

Marked out of 1.00

Given linked list of length n ,in order to find an element from a linked list the time required is?

Select one or more:

- **a. O (n)**
- **b. O (log n)**
- **c. O (1)**
- **d. O (n^2)**

Question **9**

Not yet answered

Marked out of 1.00

Assume that the operators +, -, × are left associative and ^ is right associative. The order of

precedence (from highest to lowest) is ^, x , +, -. The postfix expression corresponding to the

infix expression a + b × c - d ^ e ^ f is

Select one or more:

- **a. - + a × bc ^ ^ def**
- **b. abc × + de ^ f ^ -**
- **c. abc × + def ^ ^ -**
- **d. ab + c × d - e ^ f ^**

Question **10**

Not yet answered

Marked out of 1.00

Stack P has the elements 1, 2, 3 (with a on top). Stack Q is empty. An element popped out

of stack P can be printed immediately or pushed to stack Q. An element popped out of the

stack Q can be only be printed. In this arrangement, which of the following permutations of

1, 2, 3 are not possible?

Select one or more:

- **a. 2 3 1**
- **b. 3 1 2**
- **c. 1 2 3**
- **d. 2 1 3**

Question **11**

Not yet answered

Marked out of 1.00

In a certain office (1/3) of the workers are women, (1/2) of the women are married and (1/3) of the married women have children. If (3/4) of the men are married and (2/3) of the married men have children, what part of the workers are without children?

Select one or more:

- **a. (11/18)**
- **b. (5/18)**
- **c. (4/9)**
- **d. (17/36)**

Question **12**

Not yet answered

Marked out of 1.00

A, B and C have to distribute Rs10,000 between them. A and C together have Rs4000 and B and C together Rs7000. How much does C have?

Select one or more:

- **a. Rs3000**
- **b. Rs1000**
- **c. Rs500**
- **d. Rs2000**

Question **13**

Not yet answered

Marked out of 1.00

The sum of the digits of a two-digit number is 9. If the digits are reversed, the number is increased by 63. Find the number?

Select one or more:

- **a. 27**
- **b. 36**
- **c. 18**
- **d. 45**

Question **14**

Not yet answered

Marked out of 1.00

BLOCKED : YOLXPVW :: OZFMXS : ?

Select one or more:

- **a. RESULT**
- **b. LABOUR**
- **c. NAUGHT**
- **d. LAUNCH**

Question **15**

Not yet answered

Marked out of 1.00

There was a marginal increase in his pay. (Find the antonym for the underlined word)

Select one or more:

- **a. Unforeseen**
- **b. Peripheral**
- **c. Negligible**
- **d. Significant**

Question **16**

Not yet answered

Marked out of 1.00

A Binary Search Tree (BST) stores values in the range 37 to 573. Consider the following sequence of keys.

I. 81, 537, 102, 439, 285, 376, 305

II. 52, 97, 121, 195, 242, 381, 472

III. 142, 248, 520, 386, 345, 270, 307

IV. 550, 149, 507, 395, 463, 402, 270

Which of the following statements is TRUE?

Select one or more:

- ☐ **a. IV is a postorder sequence of some BST with 149 as the root**
- ☐ **b. II is an inorder sequence of some BST where 121 is the root and 52 is a leaf**
- ☐ **c. I is a preorder sequence of some BST with 439 as the root**
- ☐ **d. I, II and IV are inorder sequences of three different BSTs**

Question **17**

Not yet answered

Marked out of 1.00

The five items: A, B, C, D, and E are pushed in a stack, one after other starting from A. The stack is popped four items and each element is inserted in a queue. The two elements are deleted from the queue and pushed back on the stack. Now one item is popped from the stack. The popped item is

Select one or more:

- ☐ **a. C**
- ☐ **b. A**
- ☐ **c. B**
- ☐ **d. D**

Question **18**

Not yet answered

Marked out of 1.00

The height of a binary tree is the maximum number of edges in any root to leaf path. The

maximum number of nodes in a binary tree of height h is:

Select one or more:

- ☐ **a. 2*(h+1)**
- ☐ **b. 2^(h-1) – 1**
- ☐ **c. 2^h -1**
- ☐ **d. 2^(h+1) -1**

Question **19**

Not yet answered

Marked out of 1.00

Postorder traversal of a given binary search tree, T produces the following sequence of keys:

10, 9, 23, 22, 27, 25, 15, 50, 95, 60, 40, 29

Which one of the following sequences of keys can be the result of an in-order traversal of the tree T?

Select one or more:

- ☐ **a. 9, 10, 15, 22, 40, 50, 60, 95, 23, 25, 27, 29**
- ☐ **b. 29, 15, 9, 10, 25, 22, 23, 27, 40, 60, 50, 95**
- ☐ **c. 95, 50, 60, 40, 27, 23, 22, 25, 10, 9, 15, 29**
- ☐ **d. 9, 10, 15, 22, 23, 25, 27, 29, 40, 50, 60, 95**

Question **20**

Not yet answered

Marked out of 1.00

A Binary Search Tree (BST) stores values in the range 37 to 573. Consider the following sequence of keys.

I. 81, 537, 102, 439, 285, 376, 305

II. 52, 97, 121, 195, 242, 381, 472

III. 142, 248, 520, 386, 345, 270, 307

IV. 550, 149, 507, 395, 463, 402, 270

Suppose the BST has been unsuccessfully searched for key 273. Which all of the above sequences list nodes in the order in which we could have encountered them in the search?

Select one or more:

- ☐ **a. I and III only**
- ☐ **b. III and IV only**
- ☐ **c. III only**
- ☐ **d. II and III only**

Quiz Navigation

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Finish attempt ... (http://kmitonline.com/mod/quiz/summary.php?attempt=476018)

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