

Rajalakshmi Engineering College

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Batch: 2028

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2024_28_III_OOPS Using Java Lab

REC_2028_OOPS using Java_Week 10_MCQ

Attempt : 1

Total Mark : 15

Marks Obtained : 14

Section 1 : MCQ

1. What happens if two keys have the same hash code in a HashMap?

Answer

A linked list is used to store values with the same hash

Status : Correct

Marks : 1/1

2. Which of the following is true about TreeMap?

Answer

It maintains natural ordering

Status : Correct

Marks : 1/1

3. How does HashSet check for duplicate elements?

Answer

Using equals() and hashCode()

Status : Correct

Marks : 1/1

4. What will be the output of the following code?

```
import java.util.*;
class Main {
    public static void main(String[] args) {
        HashMap<String, Integer> map = new HashMap<>();
        map.put("A", 1);
        map.put("B", 2);
        map.put("C", 3);
        System.out.println(map.containsKey("B"));
    }
}
```

Answer

true

Status : Correct

Marks : 1/1

5. What will happen if you add a null element to a TreeSet?

Answer

An exception occurs

Status : Correct

Marks : 1/1

6. Which method removes all elements from a Set?

Answer

clear()

Status : Correct

Marks : 1/1

7. Which statement is true about HashSet and TreeSet?

Answer

TreeSet provides sorted elements

Status : Correct

Marks : 1/1

8. Which method retrieves the lowest key in a TreeMap?

Answer

firstKey()

Status : Correct

Marks : 1/1

9. What will be the output of the following code?

```
import java.util.*;
class Main {
    public static void main(String[] args) {
        HashMap<String, String> map = new HashMap<>();
        map.put("A", "Apple");
        map.put("B", "Banana");
        map.put("C", "Cherry");
        map.replace("B", "Blueberry");
        System.out.println(map);
    }
}
```

Answer

{A=Apple, B=Blueberry, C=Cherry}

Status : Correct

Marks : 1/1

10. Which of the following allows null keys in Java?

Answer

HashMap

Status : Correct

Marks : 1/1

11. What will happen if you add elements in descending order in a TreeSet?

Answer

They are sorted in ascending order

Status : Correct

Marks : 1/1

12. Which of the following is true about HashMap?

Answer

It is not synchronized

Status : Correct

Marks : 1/1

13. What will be the output of the following code?

```
import java.util.*;
class Main {
    public static void main(String[] args) {
        HashMap<String, Integer> map = new HashMap<>();
        map.put("X", 10);
        map.put("Y", 20);
        map.put("Z", 30);
        map.remove("Y");
        System.out.println(map);
    }
}
```

Answer

{X=10, Y=20, Z=30}

Status : Wrong

Marks : 0/1

14. What happens when you add duplicate elements to a HashSet?

Answer

The duplicate is ignored

Status : Correct

Marks : 1/1

15. What is the time complexity of retrieving an element from a HashSet?

Answer

$O(1)$

Status : Correct

Marks : 1/1