

# 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 : 15

#### **Section 1 : MCQ**

1. 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, Z=30}

**Status : Correct**

**Marks : 1/1**

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

**Answer**

HashMap

**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 happens when you add duplicate elements to a HashSet?

**Answer**

The duplicate is ignored

**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 of the following is true about HashMap?

**Answer**

It is not synchronized

**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, 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**

10. 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**

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

**Answer**

O(1)

**Status : Correct**

**Marks : 1/1**

12. Which of the following is true about TreeMap?

**Answer**

It maintains natural ordering

**Status : Correct**

**Marks : 1/1**

13. 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**

14. Which statement is true about HashSet and TreeSet?

**Answer**

TreeSet provides sorted elements

**Status : Correct**

**Marks : 1/1**

15. 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