

1. What would be the output of the following code snippet?

```
public class Main {  
    public static void func(int x, int y) {  
        System.out.println("xx");  
    }  
  
    public static void func(String x, String y) {  
        System.out.println("yy");  
    }  
  
    public static void main(String args[]) {  
        func(10, 20);  
        func('x', 'y');  
    }  
}
```

- a. xx
 yy
- b. xx
 xx
- c. yy
 yy
- d. yy
 xx

2. Which of the following options is false about final?

- a. final methods cannot be overwritten
- b. final class cannot be inherited
- c. final attributes cannot change their value
- d. all options seem to be true about final

3. Look at the pseudo code snippet below and choose the false statement from the options?

```
public static int function(int[] arr) {  
    int max = Integer.MIN_VALUE;;  
    int data = Integer.MIN_VALUE;  
    for (int i = 0; i < arr.length; i++) {  
        if (arr[i] > max)  
            max = arr[i];  
    }  
    for (int i = 0; i < arr.length; i++) {  
        if (arr[i] > data && arr[i] < max)  
            data = arr[i];  
    }  
    return data;  
}
```

- a. The code is returning the largest value in an array
- b. The code is returning the least value in an array
- c. The code is returning the second largest value of in an array
- d. The code is returning the most repeated value in the array

4. What would be the output of the following code snippet?

```
public class Sample {
    public static Sample() {
        System.out.println("sample");
    }

    public static Sample(int x) {
        System.out.println("sample x");
    }

    public static void main(String[] args) {
        Sample object1 = new Sample();
        Sample object2 = new Sample(100);
    }
}
```

- a. sample
sample x
- b. sample x
sample x
- c. sample
sample
- d. error

5. which of the following is false ?

- a. abstract class can not be instantiated
- b. abstract class can not have final methods
- c. abstract class can have constructors
- d. abstract can have both abstract & non abstract methods

6. What would be the output of following code snippet?

```
public class Main {

    public static void main(String args[]) {

        Map<String, Integer> stockPrice = new HashMap<>();

        stockPrice.put("yyy", 56);
        stockPrice.put("xxx", 117);
        System.out.println(stockPrice.get("yyy"));
    }
}
```

```

System.out.println(stockPrice.get("xxx"));
stockPrice.replace("yyy", 73);
stockPrice.replace("xxx", 118, 120);
System.out.println(stockPrice.get("yyy"));
System.out.println(stockPrice.get("xxx"));
}
}

```

- a. 56
 117
 73
 117
- b. 56
 117
 56
 117
- c. 56
 117
 73
 118
- d. 56
 117
 56
 118

7. Which of the following is true?

- a. need outer class for instantiating inner class object
- b. anonymous class can be abstract too
- c. nested classes can also be created within methods
- d. anonymous inner classes can not be created, only anonymous outer classes can be created

8. What is the complexity of adding an element to the heap.

- a. $O(\log n)$
- b. $O(h)$
- c. $O(\log n)$ & $O(h)$
- d. $O(n)$

9. A file named file.txt has the following data:

A text file has the following content in different lines

south africa

india

china

brazil

russia

oman

What would be the output of following code snippet?

```

import java.io.*;
class Read {
    public static void main(String[] args) throws Exception {
        String path = "file.txt";
        BufferedReader br = new BufferedReader(new FileReader(path));
        String stra = br.readLine();
        while (stra != null) {
            System.out.println(stra);
            br.readLine();
            stra = br.readLine();
        }
    }
}

```

- a. south africa
 india
 china
 brazil
 russia
 oman
- b. south africa
 china
 russia
- c. india
 brazil
 oman
- d. south africa
 south africa
 south africa

10. What would be the pre-order traversal if the post-order traversal of a binary tree is O P Q R S T.

- a. T Q R S O P
- b. T O Q R P S
- c. T Q O P S R
- d. T Q O S P R