Question - 1

SCORE: **10 points**

Java: Find the Output

Java | General Programming | Exception Handling | Language-Specific | Core CS
Basic Programming

Consider the following Java code snippet:

```java
public int divide(int a, int b) {
    int c = -1;

    try {
        c = a / b;
    }
    catch (Exception e) {
        System.err.print("Exception ");
    }
    finally {
        System.err.println("Finally ");
    }

    return c;
}
```

What will our code *print* when we call *divide(4, 0)*?

- ● Exception Finally

- ○ Finally Exception

- ○ Exception

- ○ Finally

- ○ No output

- ○ -1

Question - 2

SCORE: **10 points**

Java: Constructor, Exception Handling and Inheritance

Language Fundamentals | Constructors | Java | Exception Handling | Inheritance
Language-Specific | Core CS

What should be the output of the following code?

```java
class AirPlane {
    public AirPlane() throws IOException {
        System.out.print("AirPlane");
        throw new IOException();
```

```
        }
    }
class AirJet extends AirPlane {
    public AirJet() throws IOException {
      try {
          super();
      } catch (IOException e) {
          System.out.print("IOException is thrown
in AirJet");
      }
    }
}
public class Tester {
    public static void main(String args[]) {
        try {
          new AirJet();
        } catch (IOException e) {
            System.out.print("IOException is
thrown in Tester");
        }
    }
}
```

○   "AirPlaneIOException is thrown in AirJet" will be printed.

○

"AirPlaneIOException is thrown in AirJetIOException is thrown in Tester"
will be printed.

○   "AirPlaneIOException is thrown in Tester" will be printed.

◉   Compile error.

Question - 3

SCORE: **10 points**

Java   Easy   Inheritance   Object Oriented Programming

What is the output for the below code ?

```
1. public  class A {
2.      int add(int i, int j){
3.          return i+j;
4.      }
5. }
6. public class B extends A{
7.      public static void main(String argv[]){
8.          short s = 9;
9.          System.out.println(add(s,6));
10.     }
11.}
```

○   Compile fail due to error on line no 2

◉

Compile fail due to error on line no 9 due to the non-static method
referenced from a static context.

○   Compile fail due to error on line no 9 due to type mismatch.

○   15

Question - 4

Java   Easy   Iteration

What is the output for the below Java code ?

```java
public class Test {
    public static void main(String[] args){
        int i = 010;
        int j = 07;
        System.out.println(i);
        System.out.println(j);
    }
}
```

- ⦿ 8 7
- ○ 10 7
- ○ C.Compilation fails with an error at line 3
- ○ D.Compilation fails with an error at line 5

Question - 5
Java: String Array

Application Development   Java   Arrays   Core CS   Language-Specific

Which of the following Java declaration of the String array is correct?

- ○ String temp [] = new String {"j" "a" "z"};
- ○ String temp [] = { "j " " b" "c"};
- ○ String temp = {"a", "b", "c"};
- ⦿ String temp [] = {"a", "b", "c"};

Question - 6

Application Development   Java

Given the following declarations

```java
String s1=new String("Hello")
String s2=new String("there");
String s3=new String();
```

Which of the following are legal operations?

- ◉ s3=s1 + s2;
- ○ s3=s1 - s2;
- ○ s3=s1 & s2
- ○ s3=s1 && s2

Question - 7

What is the correct order for system design?

- ◉ Problem Definition --> Design --> Specification --> Implementation
- ○ Specification --> Problem Definition --> Design --> Implementation
- ○ Problem Definition --> Design --> Implementation --> Specification
- ○ Problem Definition --> Specification --> Design --> Implementation

Question - 8

Fill in the blanks of the following code fragment so that the elements of the array are printed *in **reverse** order*, starting with the last element.

```
    int[] num = { 2, 4, 6, 8, 10, 1, 3, 5, 7, 9
};

    for ( int _____ ; _____ ;
_____ )
        System.out.print(  num[ index ] + "  "  );
```

- ○ index = length-1; index > 0; index--
- ○ index = length; index < 0; index--
- ○ index = 0; index < num.length; index--
- ◉ index = num.length-1; index >= 0; index--

Question - 9

Choose the correct output according to following code:

```java
import java.util.*;
public class Demo {
    public static void main(String []args) {
        ArrayList<String> list = new ArrayList<>
();
        list.add("2");
        list.add("0");
        list.add("1");
        list.add("8");
        List<String> newList = next(list);
        list.add("9");
        for (String i: newList) {
            System.out.print(i + " ");
        }
    }

    private static List<String> next(List<String>
list) {
        list.remove(list.size()-1);
        return list;
    }
}
```

○ 2 0 1 9 8

◉ 2 0 1 9

○ 2 0 1 8 9

○ "2018"

Question - 10

SCORE: **10 points**

Which answer(s) match the given pattern?
pattern: a*b+

○ a

◉ b

○ aa

○ ba

◉ bb