1.

Which of the following statements declares a valid null reference?

Please select 1 option

- ○ String str : null;
- ○ Object obj = NULL;
- ○ Date d(null);
- ○ File f = null;

2.

Consider the following program :

```
class Test
{
  public static void main(String[] args)
  {
    short s = 10; // 1
    char c = s; // 2
    s = c; // 3
  }
}
```

Identify the correct statements.
  See Hint

Please select 2 options

- ☐ Line 3 is not valid.
- ☐ Line 2 is not valid.
- ☐ It will compile because both short and char can hold 10.
- ☐ None of the lines 1, 2 and 3 is valid.

3.

Which of the following statements can be inserted successfully at // 1?

```
public class InitTest
{
    static int si = 10;
    int  i;
    final boolean bool;
    // 1
}
```

Please select 1 option

- ○ instance { bool = true; }
- ○ InitTest() { si += 10; }
- ○ void InitTest(){ si = 5; i = bool ? 1000 : 2000;}
- ○ { i = 1000; }
- ○ InitTest() { si += 10; }
  InitTest(boolean flag) { bool = flag; }
- ○ None of the above.

4.

Which integral types in Java have a range of 2^16 integers?
OR
Which integral types in Java can represent exactly 2^16 distinct integers?

Please select 2 options

☐ char

☐ int

☐ long

☐ short

5.

Given the following LOCs:

```
int i = 0;
char ch = 'a';
```

Which of the following will put correct integer value of the char variable `ch` into the int variable `i`?

Please select 3 options

☐ i = ch ;

☐ i = (int) ch ;

☐ i << ch ;

☐ i <<< ch

☐ i += ch;

☐ i := ch;

6.

You are developing a class that represents a Book. Which data type will you use for storing the ISBN number, which is an alphanumeric number, of the book?

Please select 1 option

○ int

○ char

○ String

○ None of these.

7.

Which of the following statements are true?

Please select 2 options

☐ System.out.println(1 + 2 + "3"); would print 33.

☐ System.out.println("1" + 2 + 3); would print 15.

☐ System.out.println(4 + 1.0f); would print 5.0

☐ System.out.println(5/4); would print 1.25

☐ System.out.println('a' + 1); would print b.

8.

In which of these variable declarations, will the variable remain uninitialized unless explicitly initialized?

Please select 1 option

○ Declaration of an instance variable of type int.
○ Declaration of a static class variable of type float.
○ Declaration of a local variable of type float.
○ Declaration of a static class variable of class Object
○ Declaration of an instance variable of class Object.

9.

What will be the result of attempting to compile and run the following code?

```
public class PromotionTest
{
    public static void main(String args[])
    {
        int i = 5;
        float f = 5.5f;
        double d = 3.8;
        char c = 'a';
        if (i == f) c++;
        if (((int) (f + d)) == ((int) f + (int) d)) c += 2;
        System.out.println(c);
    }
}
```

Please select 1 option

○ The code will fail to compile.
○ It will print d.
○ It will print c.
○ It will print b
○ It will print a.

10.

Given:

```
String str = "hello\r\n" + "world";
System.out.println(str.length);
```

Please select 1 option

○ 12
○ 13
○ 14
○ Compilation error
○ Exception at run time