QUESTION BANK 3

QUESTION BANK



API CONTENTS

CERTIFICATION OBJECTIVES

- 3.1 Develop code that uses the primitive wrapper classes (such as Boolean, Character, Double, Integer, etc.), and/or autoboxing & unboxing. Discuss the differences between the String, StringBuilder, and StringBuffer classes.
- 3.2 Given a scenario involving navigating file systems, reading from files, writing to files, or interacting with the user, develop the correct solution using the following classes (sometimes in combination), from java.io: BufferedReader, BufferedWriter, File, FileReader, FileWriter, PrintWriter, and Console.
- 3.3 Develop code that serializes and/or de-serializes objects using the following APIs from java.io: DataInputStream, DataOutputStream, FileInputStream, FileOutputStream, ObjectInputStream, ObjectOutputStream and Serializable.
- 3.4 Use standard J2SE APIs in the java.text package to correctly format or parse dates, numbers, and currency values for a specific locale; and, given a scenario, determine the appropriate methods to use if you want to use the default locale or a specific locale. Describe the purpose and use of the java.util.Locale class.

Q 1: Maria works as a Programmer for BlueMoon Inc. She writes the following program:

What is the result of attempting to compile and run the program?

- A. The program will not compile.
- B. The program will display:

Total=300

Percent=40%

- C. The program will compile successfully but throw a runtime exception.
- D. The program will display: Total=300%nPercent=40%

A 1: The correct option is B.

QUESTION 3.2

Q 2: Which of the following statements about the regex API are true?

- A. The package java.util.regex contains classes for matching character sequences against patterns specified by regular expressions.
- B. The package java.util.regex includes an exception called PatternSyntaxException.
- C. Instances of Matcher class are used to represent regular expressions in the form of String type.
- D. Instances of the Pattern class are used to match character sequences against a given pattern.
- A 2: The correct options are A and B.

Q 3: Neha works as a Programmer for SoftNet Inc. She writes the following program:

```
public class TryQuestion {
    public static void main(String str[]) {
        String s="usingsplitfunction";

QUESTION 3.3

String[]ex=s.split("i");
    for(int i=0;i<ex.length;i++) {
        System.out.println(ex[i]);
    }
}</pre>
```

What will happen when Neha attempts to compile and execute the preceding program?

A. It will produce the output as:

usi

ngspli

tfuncti

on

B. It will produce the output as:

us

ingspl

iffunct

iffunct

ion

C. It will produce the output as: us

It will produce the output as:

us ngspl tfunct on

A 3: The correct option is D.

D. QUESTION 3.4

Q 4: John Smith works as a Programmer for BlueMoon Inc. He writes the following program:

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as: abcdef
- C. It will produce the output as: abc3d4ef
- B. It will produce the output as:
- D. It will produce the output as: a1b2c3d4ef

- A 4: The correct option is C.
- QUESTION 3.5

Q 5: Imagine you work as a Programmer in SoftTech Inc. You write the following program:

Which of the following statements will you insert in line 5, so that the program will compile and execute successfully and produce the output as 2?

- A. String[] $fc=s.split(" \setminus w");$
- B. String[] $c=s.split(" \setminus d");$
- C. String[] $c=s.split(" \setminus s");$
- D. String[] $c=s.split("\setminus S")$;
- A 5: The correct option is B.

Q 6: Sam works as a Programmer for BlueMoon Inc. He writes the following program:

```
import java.io.*;
public class TryQuestion {
    public static void main(string str[]) {
        try {
            FileWriter fw = new FileWriter("filereadwrite.txt");
            BufferedWriter bw=new BufferedWriter(fw);
            bw.write("have a good day");
            bw.close();
            FileReader fr = new FileReader("filereadwrite.txt");
            BufferedReader br = new BufferedReader(fr);
            br.read();
            br.read();
            crear();
            crear();

                                                                                                                                                                                                                                                             br.close();
                                                                                                                                       catch(IOException e) {
                                                                                                                                                                                                                                                             System.out.println("IOException : "+e.toString());
                }
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as "o".
- B. It will produce the output as "d".
- C. It will produce the output as "g".
- D. It will throw a runtime exception- IOException.
- A 6: The correct option is B.
- **QUESTION 3.7**
 - Q 7: Mr. Paul works as a Programmer for BlueMoon Inc. He writes the following program:

```
import java.io.*;
public class TryQuestion {
    public static void main(String str[]) {
             try {
                           Square sq=new Square(10);
Circle ci=new Circle(7);
System.out.println("Before Serialization");
                           sq.drawShape();
                           os.writeObject(ci);
                            oos.close()
                           Oos.close();
ObjectInputStream ois=new ObjectInputStream(new FileInputStream
("shapes.txt"));
sq=((Square)ois.readObject());
ci=((Circle)ois.readObject());
System.out.println("After Serialization");
                sq.drawShape();
ci.drawShape();
catch (Exception e) { e.printStackTrace(); }
ábstract class DrawObject
              public abstract void drawShape();
```

```
class Square extends DrawObject {
    private int x;
    public Square (int x) {
        this.x=x;
    }
    public void drawShape() {
            System.out.println("The side of a square is : "+x);
    }
} class Circle extends DrawObject {
        private int rad;
        public Circle(int rad) {
            this.rad=rad;
      }
      public void drawShape() {
            System.out.println("The radius of a circle is : "+rad);
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:
 Before Serialization
 The side of a square is: 10
 The radius of a circle is: 7
 After Serialization
 The side of a square is: 0
 The radius of a circle is: 0
 C. It will produce the output as:
 Before Serialization
 The side of a square is: 10
 The radius of a circle is: 7
 After Serialization
 The side of a square is: 7
 After Serialization
 The side of a square is: 0
 The radius of a circle is: 7
- B. It will produce the output as:
 Before Serialization
 The side of a square is: 10
 The radius of a circle is: 7
 After Serialization
 The side of a square is: 10
 The radius of a circle is: 7
 D. It will display the output as:
 Before Serialization
 The side of a square is: 10
 The radius of a circle is: 7

A 7: The correct option is D.



Q 8: John works as a Java Programmer for BlueMoon Inc. His computer system does not have any instance of 'LabManualTest.txt' file. John writes the following program:

```
import java.io.*;
public class TryQuestion {
    public static void main(String str[]) {
        File file = new File ("LabManualTest.txt");
        System.out.println("The existence of file is : "+file.exists());
    }
}
```

What will happen when he attempts to compile and execute the preceding program?

- A. It will produce the output as: The existence of file is: true
- C. It will not compile.
- B. It will produce the output as: The existence of file is: false
- D. It will throw a runtime exception- IOException.

A 8: The correct option is B.



Q 9: Mehtab works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
import java.text.*;
public class TryQuestion {
    public static void main(String str[]) {
        try {
            String num="one23456.789";
            NumberFormat form = NumberFormat.getInstance();
            System.out.println("Before parse the number is : "+form.parse(num));
            form.setParseIntegerOnly(true);
            System.out.println("After parse the number is : "+form.parse(num));
            }catch(ParseException pe)
            {
                  System.out.println("Parse Exception thrown");
            }
}}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as: Before parse the number is: 23456.789
 - After parse the number is: 23456
- C. It will not compile successfully.
- B. It will produce the output as:
 Before parse the number is: 23456
 After parse the number is: 23456.789
- D. It will compile successfully, but throw a runtime exception ParseException

A 9: The correct option is D.

Q 10: Smith works as a Software Developer for BlueMoon Inc. He writes the following program:

```
QUESTIOnport 0java.util.regex.*;
import java.util.*;
public class TryQuestion {
   public static void main(String str[]) {
      Pattern pat=Pattern.compile("[1-9&&[^468]]*");
      Matcher mat=null;
      mat=pat.matcher("12345");
      System.out.println(mat.matches());
      mat=pat.matcher("12579");
      System.out.println(mat.matches());
      database section of the println of the
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as: true true

B. It will produce the output as: true false

- C. It will produce the output as: false
- D. It will produce the output as: null null

A 10: The correct option is C.



QUESTION 3.11

Q 11: Kabir works as a Software Developer for SoftSample Inc. He writes the following program:

```
import java.io.*;
public class TryQuestion {
    public static void main(String[] args) throws IOException,
        ClassNotFoundException {
        MyBean sc = new MyBean("Test1", "Test2");
        System.out.println("Before:\n" + sc);
        FileOutputStream fos = new FileOutputStream("abc.txt");
        ObjectOutputStream o = new ObjectOutputStream(fos);
        o.writeObject(sc);
                                                         objectoutputstream o = new objectoutputstream(ros),
o.writeObject(sc);
o.close();
FileInputStream fis = new FileInputStream("abc.txt");
ObjectInputStream in = new ObjectInputStream(fis);
MyBean sc2 = (MyBean) in.readObject();
System.out.println("After:\n" + sc2);
  class MyBean implements Serializable {
                             private String a;
private String a;
private transient String b;
public MyBean(String aa, String bb) {
    a = "Not Transient: " + aa;
    b = "Transient: " + bb;
                              public String toString() {
          return a + "\n" + b;
                              private void writeObject(ObjectOutputStream stream) throws IOException {
    stream.defaultWriteObject();
    stream.writeObject(b);
                             private void readObject(ObjectInputStream stream) throws IOException,
ClassNotFoundException {
    stream.defaultReadObject();
    b = (String) stream.readObject();
                              }
  }
```

What will happen when he attempts to compile and execute the above program?

A. It will produce the output as:

Before:

Not Transient: Test1 Transient: Test2

After:

Not Transient: Test1 Transient: null

B. It will not compile.

C. It will produce the output as:

Before:

Not Transient: Test1 Transient: Test2

After:

Not Transient: Test1 Transient: Test2

D. It will throw a runtime exception.

A 11: The correct option is C.

QUESTION 3.12

Q 12: Vandana works as a Software Developer for SoftSample Inc. She writes the following program:

```
import java.io.*;
class X implements Externalizable {
          public X() {
                     System.out.println("X Constructor invoking");
          }
class Y implements Externalizable {
          Y() {
                     System.out.println("Y Constructor invoking");
          public class TryQuestion {
    public static void main(String[] args) throws IOException,
    ClassNotFoundException {
        System.out.println("Constructing objects b1 and b2:");
        X b1 = new x();
        Y b2 = new Y();
        Y b2 = new Y();
}
                     ObjectOutputStream o = new ObjectOutputStream(new FileOutputStream ("File.out"));
System.out.println("Saving objects b1 and b2:");
                     o.writeObject(b1);
o.writeObject(b2);
o.close();
                     o.close();
ObjectInputStream in = new ObjectInputStream(new FileInputStream
("File.out"));
System.out.println("Recovering object b1:");
b1 = (X) in.readObject();
          }
}
```

What will happen when she tries to compile and execute the preceding program?

A. It will produce the output as:

Constructing objects b1 and b2:

X Constructor invoking

Y Constructor invoking

B. It will produce the output as:
Constructing objects b1 and b2:
X Constructor invoking
Y Constructor invoking

Saving objects b1 and b2: X.writeExternal calling Y.writeExternal calling Recovering object b1: X.readExternal calling

C. It will produce the output as:
 Constructing objects b1 and b2:
 X Constructor invoking
 Y Constructor invoking
 Saving objects b1 and b2:
 X.writeExternal calling
 Y.writeExternal calling
 Recovering object b1:
 X Constructor invoking

Saving objects b1 and b2: X.writeExternal calling Y.writeExternal calling Recovering object b1: X Constructor invoking X.readExternal calling

D. It will throw a runtime exception.

A 12: The correct option is B.



Q 13: Hemant works as a Programmer for SoftSample Inc. His computer system has no instance of file1.txt and file2.txt files. Hemant writes the following program:

```
import java.io.*;
public class TryQuestion {
    public static void main(String[] args) {
        File file1 = new File("file1.txt");
        File file2 = new File("file2.txt");
        if (!file1.exists() || !file2.exists()) {
            System.out.println("One or both files do not exist");
    }
    try {
        FileInputstream fis1 = new FileInputstream(file1);
        FileInputstream fis2 = new FileInputstream(file2);
        int i1 = fis1.read();
        int i2 = fis2.read();
        fis1.close();
        fis2.close();
    } catch (IOException e) {
        System.out.println("IO exception");}
}
```

What will happen when he tries to compile and execute the preceding program, first time?

- A. It will produce the output as: One or both files do not exist
- C. It will produce the output as: One or both files do not exist IO exception
- B. It will give compilation error.
- D. It will throw a runtime exception.

A 13: The correct option is C.



Q 14: Hemani works as an Application Developer for SoftSample Inc. She writes the following program:

What will happen when she tries to compile and execute the above program (assume that the SourceReader.java file already exists on Hemani's computer system)?

- A. It will produce compile error at line 1.
- B. It will produce compile error at line 2.
- C. It will produce compile error at line 3.
- D. It will compile and execute successfully.

A 14: The correct option is C.

QUESTION 3.15

Q 15: Sumit works as a Programmer for SoftSample Inc. He writes the following program:

What will happen when he tries to compile and execute the preceding program?

- A. It will produce compile error at line 1.
- B. It will produce compile error at line 2.
- C. It will produce compile error at line 3.
- D. It will compile and execute successfully.

A 15: The correct option is D.



QUESTION 3.16

Q 16: Mohit works as a Programmer for SoftTech Inc. He writes the following program:

```
import java.text.*;
public class TryQuestion {
    public static void main(String[] args) {
        double d=1234.56789;
        NumberFormat myFormat = NumberFormat.getInstance();
        myFormat.setMaximumIntegerDigits(3);
        String radianString = myFormat.format(d);
        myFormat.setMaximumFractionDigits(3);
        String gradString =myFormat.format(d);
        myFormat.setMinimumFractionDigits(2);
        String degreeString = myFormat.format(d);
        System.out.println(gradString);
        System.out.println(radianString);
        System.out.println(degreeString);
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:
 1234.568
 234.56789
 1234.57
 C. It will produce the output as:
 234.56789
 1234.568
 1234.57
- B. It will produce the output as: 234.568
 234.568
 234.568
 D. It will produce the output as: 123.568
 234.56789

1234.57

A 16: The correct option is B.

QUESTION 3.17

Q 17: Dheeraj works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
public class TryQuestion {
    public static void main( String args[] ) {
        String s1 = new String( "hello" );
        String s2 = new String( "GOODBYE" );
        System.out.printf( "s1 = %s\ns2 = %s\n", s1, s2);
        System.out.printf( "s1 in uppercase = %s\n", s1.toUpperCase() );
        System.out.printf( "s2 in lowercase = %s\n\n", s2.toLowerCase() );
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as: s1 = hello
- B. It will produce the output as: s1 = hello

```
s2 = GOODBYE
s1 in uppercase = HELLO
s2 in lowercase = goodbye
c2 in lowercase = GOODBYE
s2 in lowercase = GOODBYE
c3 in lowercase = GOODBYE
c4 in lowercase = GOODBYE
d5 in lowercase = GOODBYE
d6 in lowercase = GOODBYE
d7 in lowercase = GOODBYE
d7 in lowercase = GOODBYE
d8 in l
```

A 17: The correct option is A.

QUESTION 3.18

Q 18: Shilpa works as a Programmer for Kogent Solutions Inc. She writes the following program:

```
public class TryQuestion {
    public static void main(String args[]) {
        String str1 = "First String";
        String str2 = "Second String";
        String str3 = str1;
        System.out.println("Length of str1: " + str1.length());
        System.out.println("Char at index 2 in str1: " + str1.charAt(2));
        if(str1.equals(str2))
        System.out.println("str1 == str2");
        else
        System.out.println("str1 != str2");
        if(str1.equals(str3))
        System.out.println("str1 == str3");
        else
        System.out.println("str1 != str3");
    }
}
```

What will happen when she tries to compile and execute the preceding program?

```
A. It will produce the output as:
Length of str1: 12
Char at index 2 in str1: i
str1!= str2
str1 == str3
C. It will produce the output as:
Length of str1: 11
Char at index 2 in str1: r
str1!= str2
str1 == str3
```

- B. It will produce the output as:
 Length of str1: 12
 Char at index 2 in str1: r
 str1 != str2
 str1 == str3
- D. It will give compilation error.

A 18: The correct option is B.



Q 19: Shivam works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
public class TryQuestion {
    public static void main(String args[]) {
```

```
String s1 = "one";
String s2 = "one";
String s3 = "two";
String s4 = "ONE";
System.out.println(s1 + " equals " + s2 + " -> " + s1.equals(s2));
System.out.println(s1 + " equals " + s3 + " -> " + s1.equals(s3));
System.out.println(s1 + " equals " + s4 + " -> " + s1.equals(s4));
System.out.println(s1 + " equals " + s4 + " -> " + s1.equals(s4));
System.out.println(s1 + " equalsIgnoreCase " + s4 + " -> " +
s1.equalsIgnoreCase(s4));
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:
one equals one -> true
one equals two -> false
one equals ONE -> true
one equalsIgnoreCase ONE -> true
C. It will produce the output as:
one equals one -> true
one equals two -> false

one equalsIgnoreCase ONE -> false

one equals ONE -> false

- B. It will produce the output as:
 one equals one -> false
 one equals two -> false
 one equals ONE -> false
 one equalsIgnoreCase ONE -> true
- D. It will produce the output as:
 one equals one -> true
 one equals two -> false
 one equals ONE -> false
 one equalsIgnoreCase ONE -> true

A 19: The correct option is D.

QUESTION 3.20

Q 20: Nirmal works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
public class TryQuestion {
    public static void main(String args[]) {
        String s1 = "MyString";
        String s2 = new String(s1);
        System.out.println(s1 + " equals " + s2 + " is " + s1.equals(s2));
        System.out.println(s1 + " == " + s2 + " is " + (s1 == s2));
    }
}
```

What will happen when he attempts to compile and execute the preceding program?

- A. It will produce the output as:

 MyString equals MyString is true

 MyString == MyString is true
- C. It will produce the output as:

 MyString equals MyString is true
 MyString == MyString is false
- B. It will produce the output as:
 MyString equals MyString is false
 MyString == MyString is false
- D. It will produce the output as:MyString equals MyString is falseMyString == MyString is true

A 20: The correct option is C.

Q 21: Sanjay works as a Software Developer for HighNet Inc. He writes the following program:

```
public class TryQuestion {
   public static void main( String args[] ) {
    String s1 = new String( "hello" );
   String s2 = new String( "india" );
   System.out.printf( "s1 = %s\ns3 = %s\n", s1, s2 );
   System.out.printf("Replace 'l' with 'L' in s1: %s\n", s1.replace('l','L'));
   System.out.printf("Replace 'i' with 'I' in s2: %s", s2.replace('d','D'));
}
 }
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:

s1 = hello

s3 = india

Replace 'l' with 'L' in s1: heLLo Replace 'i' with 'I' in s2: IndIa

C. It will produce the output as:

s1 = hello

s3 = india

Replace 'l' with 'L' in s1: heLlo

Replace 'i' with 'I' in s2: InDia

B. It will produce the output as:

s1 = hello

s3 = india

Replace 'l' with 'L' in s1: heLLo Replace 'i' with 'I' in s2: inDia

D. It will produce the output as:

s1 = hello

s3 = india

Replace 'I' with 'L' in s1: hello Replace 'i' with 'I' in s2: inDia

A 21: The correct option is B.



Q 22: Mahima works as a Programmer in SoftTech Inc. She writes the following program:

```
public class TryQuestion {
public static void main(String str[]) {
String s = new String("A bird is");
s.append("flying");
System.out.println("The value stored in String class is : "+s);
StringBuffer sb = new StringBuffer("A bird is");
sb.append("flying");
System.out.println("The value stored in StringBuffer class is : "+sb);
StringBuilder sbi = new StringBuilder("A bird is");
sbi.append("flying");
System.out.println("The value stored in StringBuilder class is : "+sbi);
}
```

What will happen when she tries to compile and execute the preceding program?

A. It will produce the output as:

The value stored in String class is: A bird

The value stored in StringBuffer class is:

A bird isflying

The value stored in StringBuilder class is:

A bird isflying

B. It will produce the output as:

The value stored in String class is: A bird isflying

The value stored in StringBuffer class is: A bird

isflying

The value stored in StringBuilder class is: A

bird isflying

D. It will give compilation error.

- C. It will produce the output as:
 - The value stored in String class is : A bird

is

The value stored in StringBuffer class is :

A bird i

The value stored in StringBuilder class is:

A bird isflying

A 22: The correct option is D.

QUESTION 3.23

Q 23: Manish works as a Programmer for SoftTech Inc. He writes the following program:

What will happen when he tries to compile and execute the preceding program?

- A. It will give compilation error at line 1.
- B. It will give compilation error at line 2.
- C. It will give compilation error at line 3.
- D. It will throw a runtime exception and prints "No console is available".

QUESTION 3.24

Q 24: Maria works as a Programmer for SoftTech Inc. She writes the following program:

```
import java.util.*;
import java.text.*;
public class TryQuestion {
    public static void main(String str[]) {
        Date date = new Date();
        DateFormat df;
        df = DateFormat.getDateInstance(DateFormat.MEDIUM, Locale.US);
        System.out.println("United States: " + df.format(date));
        df = DateFormat.getDateInstance(DateFormat.FULL, Locale.US);
```

```
System.out.println("United States: " + df.format(date));
}
```

What will happen when she tries to compile and execute the preceding program? (Assume that the current date is 5^{th} August 2008)

- A. It will produce the output as:
 United States: Aug 5, 2008
 United States: Tuesday, August 5, 2008
- C. It will give compilation error.
- B. It will produce the output as: United States: 8/5/08 United States: August 5, 2008
- D. It will throw a runtime exception.

QUESTION 3.25

Q 25: Mary works as a Programmer for SoftTech Inc. She writes the following program:

What will happen when she tries to compile and execute the preceding program?

- A. It will compile and execute successfully, but no output will be shown.

 It will produce the output as:

QUESTION 3.26

Q 26: Vikash works as a Programmer for DreamTech Inc. He writes the following program:

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:
- C. It will produce the output as: K
- B. It will produce the output as:
- D. It will give compilation error.

Q 27: Kabir works as a Programmer for SoftTech Inc. He writes the following program:

```
public class TryQuestion {
public static void main(String[] str)
System.out.println(400+Integer.valueOf("200"));
}}
```

What will happen when he tries to compile and execute the above program?

- A. It will produce the output as:
- C. It will give compilation error.
- B. It will produce the output as: 400+200
- D. It will throw a runtime exception.

QUESTION 3.28

Q 28: Suchita works as a Programmer for DreamTech Inc. She writes the following program:

```
}}
```

What will happen when she tries to compile and execute the preceding program?

- A. It will produce the output as: abcd
- C. It will produce the output as:
- 65
- B. It will produce the output as:
- D. It will give compilation error.

QUESTION 3.29

Which of the following statements are true about the metacharacters?

- A. \s: It is used for a non-whitespace character
- B. \S: It is used for a whitespace character
- C. \w: It is used for a word character
- D. \W: It is used for a non- word character

Q 30: Manisha works as a Programmer for SoftTech Inc. She writes the following program:

```
public class TryQuestion {
    public static void main(String[] str) {
        int x=10;
        int y=20;
        System.out.println("Total is: "+x+y);
        String s="10";
        s=s.concat("20");
        System.out.println("Total is: "+s);
}}
```

What will happen when she tries to compile and execute the preceding program?

```
A. It will produce the output as:

Total is: 30

Total is: 1020

Total is: 1020

C. It will produce the output as:

Total is: 30

Total is: 30

Total is: 1020
```

QUESTION 3.31

Total is: 1020

Q 31: Ritu works as a Programmer for Kogent Solutions Inc. She writes the following program:

```
public class TryQuestion {
    public static void main(String[] str) {
        String s1 = "hello world";
        System.out.println(s1);
        int x=s1.length();
        for(int i=0;1<x;i+=2)
        System.out.print(s1.charAt(i));
}}</pre>
```

Total is: 10

What will happen when she tries to compile and execute the preceding program?

- A. It will produce the output as:
 hello world
 hlowrd

 B. It will produce the output as:
 hello world
 el ol
- C. It will give compilation error at line 1.

D. It will give compilation error at line 2.

QUESTION 3.32

Q 32: Mehtab works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
import java.util.regex.*;
import java.util.*;
public class TryQuestion {
public static void main(String s[]) {
Pattern pat=Pattern.compile("(hello){1}-(world){2}");
Matcher mat=null;
mat=pat.matcher("hello-worldworld");
System.out.println(mat.matches());
mat=pat.matcher("(hello){1}-(world){2}");
```

```
System.out.println(mat.matches());
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:
true
true
true

It will produce the output as:
true
true
false

C. It will produce the output as:
false
true

D. It will produce the output as:
null
null

QUESTION 3.33

Q 33: Deepak works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
public class TryQuestion {
public static void main(String sr[]) {
Integer i=null;
i=new Integer(100);
int j=200;
i=j;
i=300;
System.out.println(i++);
Short s=10;
i=s;
System.out.println(i--);
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:

301

9

10

B. It will give compilation error. D. It will throw a runtime exception.

QUESTION 3.34

Q 34: Rajeev works as a Programmer for SoftTech Inc. He writes the following program:

```
public class TryQuestion {
  public static void main(String str[]) {
      String s1=Double.toString(65);
      String s2=Double.toHexstring(65);
      System.out.println(s1+" "+s2);
    }
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as: 65.0 0x1.04p6

C. It will give compilation error at line marked as 1.

B. It will produce the output as: 0x1.04p6

D. It will give compilation error at line marked as

Q 35: Mala works as a Programmer for EasySoftTech Inc. She writes the following program:

What will happen when she tries to compile and execute the preceding program?

- A. It will produce the output as: They are equal
- C. It will give compilation error at line marked as 1.
- B. It will produce the output as: They are not equal
- D. It will give compilation error at line marked as

QUESTION 3.36

Q 36: Manish works as a Software Developer for NewTech Inc. He writes the following program:

```
public class TryQuestion {
    public static void main(String str[]) {
        Integer num=10;
        Boolean bl;
        bl=(num instanceof Integer);
        System.out.println(bl);
        bl=(num instanceof Number);
        System.out.println(bl);
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:

true

true

C. It will produce the output as:

false true B. It will produce the output as:

true false

D. It will give compilation error.



Q 37: Vineet works as an Application Developer for AllienSoftTech Inc. He writes the following program:

What will happen when he attempts to compile and execute the preceding program?

- A. It will produce the output as: They are equal
- C. It will give compilation error at line marked as 1.
- B. It will produce the output as: They are not equal
- D. It will give compilation error at line marked as 2.

QUESTION 3.38

Q 38: Vineet works as a Software Developer for AllienSoftTech Inc. He writes the following program:

```
import java.util.*;
public class TryQuestion {
public static void main(string str[]){
int total=0;
ArrayList <Double> arrl=new ArrayList <Double>();
for(double d=0.0; d<10.0;d++)
{
arrl.add(d);
}
for(double d2:arrl)
{
total+=d2;
}
System.out.println("Total = "+total);
}
</pre>
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:
- Total = 0 C. It will give compilation error.
- B. It will produce the output as:
 - Total = 45
- D. It will throw a runtime exception.

QUESTION 3.39

Q 39: Aditya works as a Programmer for AllienSoftTech Inc. He writes the following program:

```
public class TryQuestion {
    static public void display(Integer num) {
        System.out.println("Integer");
}
```

What will happen when Aditya tries to compile and execute the preceding program?

A. It will produce the output as:

Float

}

Double

C. It will produce the output as:

Integer Float B. It will produce the output as:

Integer

Double

D. It will throw a runtime exception

QUESTION 3.40

Q 40: Sumit works as a Programmer in AllienSoftTech Inc. He writes the following program:

```
public class TryQuestion {
    static public void display(Integer num) {
        System.out.println("Integer");
    }
    static public void display(Float num) {
        System.out.println("Float");
    }
    static public void display(Double num) {
            System.out.println("Double");
    }
    public static void main(String str[]) {
            display(50);
            display(50.5);
    }
}
```

What will happen when he tries to compile and execute the preceding program?

A. It will produce the output as:

Float Double

C. It will produce the output as:

Integer Float B. It will produce the output as:

Integer Double

D. It will throw a runtime exception.

Q 41: Renu works as a Java Programmer for AllienSoftTech Inc. She writes the following program:

What will happen when Renu tries to compile and execute the preceding program?

- A. It will produce the output as: Double
- C. It will produce the output as: Float
- B. It will produce the output as: Integer
- D. It will throw a runtime exception

QUESTION 3.42

Q 42: Kabir works as a Programmer for AllienSoftTech Inc. He writes the following program:

What will happen when Kabir tries to compile and execute the preceding program?

- A. It will produce the output as:
 - 3.14
 - 3.14
- B. It will throw a runtime exception.
- C. It will give compilation error at the line marked as 1.
- D. It will give compilation error at the line marked as 2.

Q 43: Charu works as a Programmer for AllienSoftTech Inc. She writes the following program:

```
import java.util.regex.*;
public class TryQuestion {
    public static void main(String str[]){
        Pattern p = Pattern.compile("Charu");
        String nameString = "My name is Charu Charu Verma.";
        Matcher matcher = p.matcher(nameString);
        matcher.find();
        System.out.println(matcher.group());
    }
}
```

What will happen when Charu attempts to compile and execute the preceding program?

- A. It will produce the output as:
 - Charu
- B. It will produce the output as: CharuCharu
- C. It will give compilation error.
- D. It will throw a runtime exception.

A 43: The correct option is A.

Explanation: In the preceding program, the compile() method is accepting a regular expression "Charu" as argument. An object of Matcher class is searching the regular expression in a given text "My name is Charu. Charu Verma.". It also does not have a public constructor. A Matcher object is created by invoking the matcher() method on a Pattern object. The find() method of Matcher class is used by regex engine to perform searching. It returns true if it gets a match, and remembers the start position of the match. Therefore, in the program the find() method is finding the expression "Charu" in the input sequence "My name is Charu. Charu Verma.". The group() method of Matcher class returns "Charu" as it is the first matched input subsequence. The program will compile and execute successfully and display the output as given in option A.