Question 1

Given the code fragment:

var pool = Executors.newFixedThreadPool(5);

Future outcome = pool.submit(() > 1);

Which type of lambda expression is passed into submit()?

Options:

A- java.lang.Runnable

B- java.util.function.Predicate

C- java.util.function.Function

D- java.util.concurrent.Callable

Answer:

D

Question 2

Given:

```
public static void main(String[] args) {
    try (Reader reader1 = new FileReader("File1.txt");
         Reader reader2 = new FileReader("File2.txt");
         Reader reader3 = new FileReader("File3_txt")) {

    } catch (IOException ex) {
        Logger.getLogger(Main.class.getName()).log(Level.SEVERE, null, ex);
    }
    // Line 1
    System.out.println("Done");
}
```

When run and all three files exist, what is the state of each reader on Line 1?

Options:

A- All three readers are still open.

B- All three readers have been closed.

C- The compilation fails.

D- Only reader1 has been closed.

Answer:

C

Question 3

Question Type: MultipleChoice

Which three guidelines are used to protect confidential information? (Choose three.)

Options:

A- Limit access to objects holding confidential information.

B- Clearly identify and label confidential information.

C- Manage confidential and other information uniformly.

D- Transparently handle information to improve diagnostics.

E- Treat user input as normal information.

F- Validate input before storing confidential information.

G- Encapsulate confidential information.

Answer:

A, D, F

Question 4

Question Type: **MultipleChoice**

Given the Person class with age and name along with getter and setter methods, and this code fragment:

```
List<Person> persons = new ArrayList(List.of(new Person(44,"Tom"),
                                             new Person(40,"Aman"),
                                             new Person(40,"Peter")));
persons.sort(Comparator.comparing((Person::getAge))
                                  .thenComparing(Person::getName)
                                  .reversed());
persons.forEach(p1->System.out.print(" "+p1.getName()));
```

What will be the result?

Options:

A- Aman Tom Peter

B- Tom Aman Peter

C- Aman Peter Tom

D- Tom Peter Aman

Answer:

C

Question 5

Question Type: **MultipleChoice**

Given:

```
public class Employee {
    private String name;
    private String locality;
    /* the constructor, getter and setter methods code goes here */
}
```

and:

```
 8. List<Employee> roster = new ArrayList<>();
 9. long empCount = roster.stream()
10. /* insert code here */
11. System.out.print(empCount);
```

Which code, when inserted on line 10, prints the number of unique localities from the roster list?

Options:

A- .map(Employee::getLocality)
.distinct()
.count();

B- map(e > e.getLocality())
.count();

C- .map(e > e.getLocality())
.collect(Collectors.toSet())
.count();

D- .filter(Employee::getLocality)
.distinct()
.count();

Answer:

D

Question 6

Given:

```java
public class Main {
    class Student {                              // line 1
        String classname;
        Student(String classname) {             // line 2
            this.classname = classname;
        }
    }
    public static void main(String[] args) {
        var student = new Student("Biology");   // line 3
    }
}
```

Which two independent changes will make the Main class compile? (Choose two.)

Options:

A- Move the entire Student class declaration to a separate Java file, Student.java.

B- Change line 2 to public Student(String classname).

C- Change line 1 to public class Student {.

D- Change line 3 to Student student = new Student("Biology");.

E- Change line 1 to static class Student {.

Answer:

B, D

Question 7

Question Type: MultipleChoice

Given:

```
public class Main {
    public static void main(String[] args) {
        var numbers = List.of(1,2,3,4,5,6,7,8,9,10);
        Optional<Integer> result = numbers.stream().filter(x -> x % 3 != 0).reduce((i, j)
-> i + j);
        result.ifPresent(System.out::print); // line 1
```

Which is true about line 1?

Options:

A- If the value is not present, a NoSuchElementException is thrown at run time.

B- It always executes the System.out::print statement.

C- If the value is not present, a NullPointerException is thrown at run time.

D- If the value is not present, nothing is done.

Answer:

D

Question 8

Question Type: MultipleChoice

Given the contents:

MessageBundle.properties file:

message=Hello

MessageBundle_en.properties file:

message=Hello (en)

MessageBundle_US.properties file:

message=Hello (US)

MessageBundle_en_US.properties file:

message=Hello (en_US)

MessageBundle_fr_FR.properties file:

message=Bonjour

and the code fragment:

```
Locale.setDefault(Locale.FRANCE);

Locale currentLocale = new Locale.Builder().setLanguage("en").build();

ResourceBundle messages = ResourceBundle.getBundle("MessageBundle", currentLocale);

System.out. println(messages.getString("message"));
```

Which file will display the content on executing the code fragment?

Options:

A- MessageBundle_en_US.properties

B- MessageBundle_en.properties

C- MessageBundle_fr_FR.properties

D- MessageBundle_US.properties

E- MessageBundle.properties

Answer:

C

Question 9

Given:

```
Integer[] intArray = {2, 1, 3, 4, 5};
List<Integer> list =
new ArrayList<>(Arrays.asList (intArray));
list.parallelStream()
    .forEach(e -> System.out.print(e + " "));
```

Which two are correct? (Choose two.)

Options:

A- The output will be exactly 2 1 3 4 5.

B- The program prints 1 4 2 3, but the order is unpredictable.

C- Replacing forEach() with forEachOrdered(), the program prints 2 1 3 4 5, but the order is unpredictable.

D- Replacing forEach() with forEachOrdered(), the program prints 1 2 3 4 5.

E- Replacing forEach() with forEachOrdered(), the program prints 2 1 3 4 5.

Answer:

B, D