Started on	Thursday, 31 October 2024, 3:59 AM
State	Finished
Completed on	Thursday, 31 October 2024, 4:28 AM
Time taken	29 mins 50 secs
Marks	29.50/30.00
Grade	**9.83** out of 10.00 (**98**%)

Question 1

Complete

Mark 1.00 out of 1.00

Study the following Java code:

```
public final class Test {
   void f() {
      System.out.print(1);
   }
}
class Test2 extends Test {
    void f() {
        System.out.print(2);
    }
}
class Program {
     public static void main (String[] args){
         Test obj = new Test2();
         obj.f();
     }
}
```

What is it's result?

Select one:

- a. Compile-time error
- b. 2
- c. None of the others
- d. 1

Question 2

Complete

Mark 1.00 out of 1.00

Study the following code:

```
public class Test {
    int x= 5;
    int y=2;
    public static void main (String[] args){
        Test obj;
        obj.x=10;
        obj.y=20;
        System.out.println(obj.x + obj.y);
    }
}
```

What is output?

Select one:

- a. Error
- b. 30
- c. 7
- d. None of the others

Question 3

Complete

Mark 1.00 out of 1.00

Hiding internal data from the outside world, and accessing it only through publicly exposed methods is known as data .....

Select one:

- a. grouping
- b. specification
- c. aggregation
- d. encapsulation

Question 4

Complete

Mark 0.50 out of 1.00

Inheritance implementations in OO languages support a way to .....

Select one or more:

- a. re-use codes.
- b. increase the cost of software deveopment.
- c. reduce the cost of software development.
- d. cause more complexity in programming.

Question **5**

Complete

Mark 1.00 out of 1.00

Common behavior can be defined in a **superclass** and inherited into a **subclass** using the.....keyword.

A collection of methods with no implementation is called an .....

Select one:

- a. implements, abstract class
- b. extends, abstract class
- c. None of the others
- d. is, interface
- e. extends, interface

Question **6**

Complete

Mark 1.00 out of 1.00

Study the following declarations:

```
class A {
   int x=5;
   void MA() { }
   void MA(int x) { }
   void M() { }
}
class B extends A {
   int y=6;
   public void M(){
      System.out.print(x +y );
   }
}
```

Select one:

- a. None of the others.
- b. Overriding method technique is used.
- c. The abstraction feature is used.
- d. Overloading method technique is used.
- e. Both overriding and overloading method techniques are used.

Question 7

Complete

Mark 1.00 out of 1.00

Stydy the following code:

```
class A {
   int x=5;
   void M() { System.out.print(x);}
}
class B extends A {
   int y=6;
   public void M() { System.out.print(x +y );   }
}
class C extends B {
   int z=2;
   public void M() {    System.out.print(x +y+z );   }
}
```

Code for using classes:

```
A obj= new C();
obj.M();
```

Select one:

- a. A compile-time error.
- b. None of the others.
- c. The output is 5
- d. The output is 13

Question 8

Complete

Mark 1.00 out of 1.00

Study the following code:

```
class A {
   int x=5;
   void M() { System.out.print(x);}
}
class B extends A {
   int y=6;
   public void M() { System.out.print(x );   }
}
class C {
   int x=2;
   public void M() {    System.out.print(x );   }
}
```

Code for using classes:

```
A obj= new C();
obj.M();
```

Select one:

- a. The output is 2
- b. None of the others.
- c. A compile-time error.
- d. The output is 5

Question 9

Complete

Mark 1.00 out of 1.00

Study the following code:

```
public interface MyInterface {

 void M1(double x);

 void M2(int aValue) { System.out.println("Hi Mom " + aValue); }

}
```

Select one:

- a. This code will be compiled to the MyInterface.class file
- b. None of the others.
- c. This code will be compiled successfully.
- d. This code causes an error when it is compiled.

Question **10**

Complete

Mark 1.00 out of 1.00

Select correct declarations:

(1) **interface MyInterface** {
}

(2) **abstract class A** {
void M1() { System.out.print("M1") ; }
void M2() { System.out.print("M2") ; }
}

(3) **class B** {
abstract void M1() { System.out.print("M1") ; }
void M2() { System.out.print("M2") ; }
}

Select one or more:

- [ ] a. 3
- [x] b. 1
- [x] c. 2

Question **11**

Complete

Mark 1.00 out of 1.00

(1) The `enum` declaration defines a *class* (called an *enum type*). The enum class body can include methods and other fields. So, it can contains constructors.

(2) A nested class is a member of its enclosing class and, as such, has access to other members of the enclosing class, even if they are declared private.

(3) Nested classe is a way of logically grouping classes that are only used in one place and it increases encapsulation.

Select one:

- a. true, true, true
- b. true, false, true
- c. false, false, true
- d. false, false, false
- e. false, true, true

Question 12

Complete

Mark 1.00 out of 1.00

Study the following code:

```
public interface I1 {
    void aMethod(int aValue){
        System.out.println("Hi Mom");
    }
}
```

Select one:

a. This code is invalid because the method aMethod does not access parameter.

b. This code is invalid because the method aMethod must be prototype only.

c. This code is valid.

d. None of the others

Question 13

Complete

Mark 1.00 out of 1.00

Study declarations:

(a)

```
public interface I1 {
}
```

(b)

```
public interface I2 {
    void m();
}
```

The code (a) is ____, and (b) is ____

Select one:

- a. invalid, valid
- b. valid, invalid
- c. valid, valid
- d. invalid, invalid

Question **14**

Complete

Mark 1.00 out of 1.00

The ultimate ancestor of all Java classes is the ..... class.

Select one:

- a. SuperClass
- b. Ancestor
- c. None of the others.
- d. Starter
- e. Class

Question **15**

Complete

Mark 1.00 out of 1.00

The `Object`'s `toString()` method returns a `String` representation of the object which is very useful for debugging. This string includes .....

Select one or more:

- [ ] a. a binary number
- [x] b. the class name of the object
- [ ] c. a decimal number
- [x] d. The @ symbol
- [x] e. a hexadecimal number

Question **16**

Complete

Mark 1.00 out of 1.00

The java.lang.String class represents for a .....string of characters.
The java.lang.StringBuilder class represents for a .....string of characters.

Select one:

- a. immutable, dynamic modifiable
- b. modifiable, immutable
- c. immutable, fixed
- d. mutable, modifiable

Question **17**

Complete

Mark 1.00 out of 1.00

A wrapper class encapsulates a single ..... value.
Wraper classes support methods for .....

Select one:

- a. immutable, output data
- b. mutable, type conversion
- c. immutable, type conversion
- d. modifiable, input data

Question 18

Complete

Mark 1.00 out of 1.00

The java.util package contains .....

Select one or more:

- [ ] a. the Thread class.
- [x] b. common used classes such as Date, Calendar, Formatter, Timer
- [x] c. API interfaces and classes of Java Collection framework.
- [ ] d. the Math class.

Question **19**

Complete

Mark 1.00 out of 1.00

What is the output of the following Java code:

```
// Suppose that all basic API were imported
.....
public static void main(String args[]) {
      SortedSet<StringBuffer> s = new TreeSet<StringBuffer>();
      s.add(new StringBuffer("Red"));
      s.add(new StringBuffer("White"));
      s.add(new StringBuffer("Blue"));
      System.out.println(s.first());
  }
```

Select one:

- a. An exception is thrown.
- b. None of the others.
- c. Blue
- d. Red
- e. White

Question 20

Complete

Mark 1.00 out of 1.00

With respect to the **java.io** package,

The .....class makes it easier to write platform-independent code that examines and manipulates files.

The .....class makes it easier to write platform-independent code that examines and manipulates directories.

Select one:

- a. File, File
- b. File, Files
- c. File, Directory
- d. File, Folder
- e. File, Dir

Question 21

Complete

Mark 1.00 out of 1.00

What class should you use to read a few pieces of data that are at known positions and data-types in a file?

Select one:

- a. java.io.File
- b. java.io.FileInputStream
- c. java.io.PrintWriter
- d. java.io.FileOutputStream
- e. java.io.RandomAccessFile

Question 22

Complete

Mark 1.00 out of 1.00

If you want to append data to the end of an existed text file, named **f1.txt** ? Show suitable declaration code you would use.

Select one:

- a. FileWriter writer = new FileWriter ("t1.txt", true);
- b. FileWriter writer = new FileWriter ("t1.txt");
- c. PrintWriter writer = new PrintWriter ("t1.txt");
- d. PrintWriter writer = new PrintWriter ("t1.txt", true);

Question 23

Complete

Mark 1.00 out of 1.00

With respect to IO in Java, select correct statements.

(1) Low-level binary streams will read/write byte-by-byte data from/to data sources.

(2) High-level binary streams will read/write general-format data from/to data sources.

(3) Reader/ Writer classes will read/write text from/to data sources.

(4) Reader/ Writer classes will read/write binary number from/to data sources..

Select one:

- a. 1, 4
- b. 2, 4
- c. None of the others
- d. 1, 2, 3
- e. 1, 2, 4

Question 24

Complete

Mark 1.00 out of 1.00

An *I/O Stream* represents an input source or an output destination. A stream can represent many different kinds of sources and destinations, including ……

Select one:

- a. All of the others.
- b. other programs
- c. devices
- d. disk files
- e. memory arrays

Question 25

Complete

Mark 1.00 out of 1.00

Programs use *byte streams* to perform input and output of 8-bit bytes. All byte stream classes are descended from two abstract classes …… and ……

Select one:

- a. InputStream, OutputStream
- b. ISteam, OStream
- c. ByteInputStream, ByteOutputStream
- d. None of the others.

Question 26

Complete

Mark 1.00 out of 1.00

All character stream classes are descended from two abstract class ....., and .....

Select one:

- a. CharacterInputStream, CharacterOutputStream
- b. ReadCharacter, WriteCharacter
- c. Reader, Writer
- d. None of the others.

Question 27

Complete

Mark 1.00 out of 1.00

..... is a line-oriented I/O class.

Select one or more:

- a. LineReader
- b. PrintWriter
- c. BufferedReader
- d. LineWriter

Question 28

Complete

Mark 1.00 out of 1.00

Classes and interface must be used for working with object streams: .....

Select one or more:

- [ ] a. FileReader
- [x] b. java.io.ObjectOutputStream
- [x] c. java.io.Serializable
- [x] d. java.io.ObjectInputStream
- [ ] e. FileWriter

Question 29

Complete

Mark 1.00 out of 1.00

..... streams mainly support binary I/O of primitive data type values.

Select one:

- (•) a. Data
- ( ) b. Character
- ( ) c. Object
- ( ) d. Binary

Question 30

Complete

Mark 1.00 out of 1.00

A .class file contains .....

Select one:

- a. Machine codes
- b. Java bytecodes.
- c. CPU codes.
- d. Assembly codes