Started on	Monday, 20 February 2023, 2:06 PM
State	Finished
Completed on	Monday, 20 February 2023, 2:39 PM
Time taken	32 mins 43 secs
Marks	10.00/20.00
Grade	**50.00** out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

What will be the output of the program given below?

```
class A1
{
         A1 ()
        {
                 fun();
         }
         public void fun ()
        {
                 System.out.print ("A1 ");
         }
}
class A2 extends A1
{
         A2()
        {
                 fun();
         }
         public void fun ()
        {
                 System.out.print ("A2 ");
         }
}
class A3 extends A2
{
         A3()
        {
                 fun();
         }
         public void fun ()
        {
                 System.out.print ("A3 ");
         }
}
class Test
{
         public static void main (String args[])
        {
                 A2 A = new A2();
         }
}
```

Select one:

a.

```
A3 A2 A2
```

b.

```
 A3 A2 A1
```

c. A2 A2

d.

```
A1 A2 A3
```

The correct answer is: A2 A2

Question 2

Complete

Mark 1.00 out of 1.00

Which of the following statement is correct about the program given below?

```
interface A
{
        void meth1();
}

interface B extends A
{
        void meth2();
        void meth3();
}

class MyClass implements B
{
        public void meth2()
        {
                System.out.println ("Implement meth2().");
        }
        public void meth3()
        {
                System.out.println ("Implement meth3().");
        }
}
class IFExtend
{
        public static void main (String arg[])
        {
                MyClass ob = new MyClass();
                ob.meth1();
                ob.meth2();
                ob.meth3();
        }
}
```

Select one:

a.

```
The program will generate compile time error.
```

b.

```
The program will print the output:
  Implement meth2().
  Implement meth3().
```

c.

```
The program will generate run time error.
```

d.

```
The program will print the output:
   Implement meth2().
   Implement meth3().
```

The correct answer is:

```
The program will generate compile time error.
```

Question **3**

Complete

Mark 1.00 out of 1.00

What will be the output of the program given below?

```
class Super
{
        protected
                int a,b;
        public
                int i;
                int j;
                char ch;
        Super()
        {
                Call();
        }
        void Call()
        {
                i = 20;
                j = (int) 3.14;
                ch = 'M';
                Display();
        }
        void Display ()
        {
                int sum;
                sum = i + j + ch;
                System.out.print (sum + " ");
        }
}
class subSuper extends Super
{
        public
                float b1;
          int count;
          void fun ()
          {
                  count = 10;
                  b1 = 20;
                  count += 1;
                  b1 += 1;
          }
}
class Sub extends subSuper
{
        subSuper s;
        Super s1;
        Sub()
        {
                fun();
                DIS();
        }
        void DIS()
        {
                System.out.println (count +" " + b1 +" " +
b);
```

```
        }
}
class Demo
{
        public static void main (String args[])
        {
                Sub s = new Sub();
        }
}
```

Select one:

- **a.**

```
100 11 21.0 21
```

- **b.**

```
100 11 21.0 0
```

- **c.**

```
100 11 21.0 1
```

- **d.**

```
100 11 21.0 11
```

The correct answer is:

```
100 11 21.0 0
```

Question 4

Complete

Mark 0.00 out of 1.00

```
What is the output of the following code?
1: interface Nocturnal {
2: default boolean isBlind() { return true; }
3: }
4: public class Owl implements Nocturnal {
5: public boolean isBlind() { return false; }
6: public static void main(String[] args) {
7: Nocturnal nocturnal = (Nocturnal)new Owl();
8: System.out.println(nocturnal.isBlind());
9: }
10: }
```

Select one:

- **a. false**
- **b.**
  ```
  The code will not compile because of line 8
  ```
- **c.**
  ```
  The code will not compile because of line 5
  ```
- **d.**
  ```
  The code will not compile because of line 2
  ```
- **e.**
  ```
  The code will not compile because of line 7
  ```
- **f. true**

The correct answer is: false

Question **5**

Complete

Mark 1.00 out of 1.00

Which of the following is not a valid type of inheritance in JAVA?

Select one:

a. Hierarchical Inheritance

b. Single Inheritance

c. Multilevel Inheritance

d. Multiple Inheritance(distributive)

The correct answer is:

Multiple Inheritance(distributive)

Question 6

Complete

Mark 0.00 out of 1.00

```
What is the result of the following code?
1: public abstract class Bird {
2: private void fly() { System.out.println("Bird is flyin
g"); }
3: public static void main(String[] args) {
4: Bird bird = new Pelican();
5: bird.fly();
6: }
7: }
8: class Pelican extends Bird {
9: protected void fly() { System.out.println("Pelican is f
lying"); }
10: }
```

Select one:

- **a.** `The code will not compile because of line 9`
- **b.** `The code will not compile because of line 5`
- **c.** `The code will not compile because of line 4`
- **d.** `Bird is flying`
- **e.** `Pelican is flying`

The correct answer is:

`Bird is flying`

Question 7

Complete

Mark 0.00 out of 1.00

Method overridding occurs_____.

Select one:

a.

when the subclass is the inner class of the superclass.

b.

when the name of the methods in the subclass and super class are identical excluding return type and parameters

c.

when the name of the class and the method are identical.

d.

only when the name and type signatures of the two methods are identical both in subclass and superclass.

The correct answer is:

only when the name and type signatures of the two methods are identical both in subclass and superclass.

Question 8

Complete

Mark 0.00 out of 1.00

Which of the following statement is correct about program given below?

```
class Super
{
        Super()
        {
                System.out.println("Non-argument");
        }
        Super (int a)
        {
                System.out.println("With-argument");
        }
}
class Sub extends Super
{
        Sub()
        {
                System.out.println("Sub Non-argument");
        }
}
class Test
{
        public static void main (String args[])
        {
                Sub s = new Sub();
                Sub ss = new Sub (1);
        }
}
```

Select one:

a.

```
The above program will print the output
   "Non-argument
   Sub Non-argument
   With-argument"
```

b.

```
 The above program will print the output
   "Non-argument
   Sub Non-argument"
```

c.

```
Above program will not compile successfully
```

d.

```
The above program will print the output
  "With-argument"
```

The correct answer is:

```
Above program will not compile successfully
```

Question 9

Complete

Mark 0.00 out of 1.00

.Which of the following statement is correct about program given below?

```
class Min
{
        public int z;
        Min()
        {
                z = 1;
        }
        void showdata()
        {
                System.out.print(z + "");
        }
}

class Max extends Min
{
        public int z1;
        Max()
        {
                z1 = 2;
        }
        void showdata()
        {
                System.out.print(z1 + "");
        }
}
class More extends Max
{
        public More()
        {
                System.out.print (z1 +"");
        }
}
class MinMaxMore
{
        public static void main (String args[])
        {
                More M = new More();
    }
}
```

Select one:

a.

The above program will print the output 1 2.

b.

The above program will print the output 2.

c.

```
The above program will print two non-negative numbers.
```

d.

```
The above program will report compilation error.
```

The correct answer is:

```
The above program will print the output 2.
```

Question 10

Complete

Mark 1.00 out of 1.00

Which of the following statement is correct about program given below?

```
class ABC
{
        int i;
        float j;
        ABC()
        {
                i = 0;
                j = 0;
        }
        void ABC()
        {
                System.out.println ( i + " " + j);
        }
}

class abc1 extends ABC
{
        abc1()
        {
                i = 10;
                j = 20;
        }
        void ABC()
        {
                System.out.println ( i + " " + j);
        }
}

class Main
{
        public static void main ( String args[])
        {
                ABC b = new ABC();
                abc1 d = new abc1();
                b = d;
                b.ABC();
        }
}
```

Select one:

a.

```
Above program will print the output: 10 20.0
```

b.

```
Above program will print the output: 10 30.0
```

c.

```
Above program will report a run time exception.
```

d.

```
Above program will report an error on compilation
```

The correct answer is:

```
Above program will print the output: 10 20.0
```

Question 11

Complete

Mark 1.00 out of 1.00

What will be the output of the program given below?

```
class A
{
        int i,j;
        A (int a, int b)
    {
                i = a;
                j = b;
        }
        void show()
    {
                System.out.println (i);
                System.out.println (j);
    }
}
class B extends A
{
        int k;
        B (int a, int b, int c)
    {
                super (a, b);
                k = c;
    }
        void show()
    {
                System.out.println (k);
    }
}
class Override1
{
        public static void main (String args[])
       {
                B Obj = new B (1, 2, 3);
                Obj.show();
    }
}
```

Select one:

- **a. 1**
- **b. 2**
- **c. 0**
- **d. 3**

The correct answer is: 3

Question 12

Complete

Mark 0.00 out of 1.00

What will be the output of the program given below?

```
class Super
{
        Super()
        {
                System.out.print ("Super ");
                        Sub();
        }
        void Sub()
        {
                System.out.print ("SubOne ");
        }
}
class Sub extends Super
{
        Sub()
        {
                System.out.print ("SubTwo ");
        }
        void Sub()
        {
                System.out.print ("SubFun ");
        }
}
class Main
{
        public static void main (String Args[])
        {
                Super S = new Sub();
        }
}
```

Select one:

a.

```
Super SubFun SubOne
```

b.

```
Super SubOne
```

c.

```
Super SubTwo
```

d.

```
Super SubFun SubTwo
```

The correct answer is:

```
Super SubFun SubTwo
```

Question 13

Complete

Mark 1.00 out of 1.00

Which of the following statement is correct about program given below?

```
class abc
{
        void Show ( ) { }
}
class xyz extends abc
{
        void Show ( )
        {
                System.out.println ("Hello");
        }
}
class TestDemo
{
        public static void main (String argc[])
        {
                abc A = new abc();
                A.Show();
        }
}
```

Select one:

- **a.** Above program will print "Hello".
- **b.** Above program will report run-time error.
- **c.** Above program will report compilation error.
- **d.** Above program will not print anything in console.

The correct answer is:

Above program will not print anything in console.

Question 14

Complete

Mark 0.00 out of 1.00

Which statements are true for both abstract classes and interfaces? (Choose all that apply)

Select one or more:

- [x] **a.** Neither can be instantiated directly.
- [x] **b.** All methods within them are assumed to be abstract.
- [x] **c.** Both can contain public static final variables.
- [ ] **d.** Both can contain default methods
- [ ] **e.** Both can be extended using the extend keyword.
- [ ] **f.** Both can contain static methods.

The correct answer is:

Both can contain public static final variables.

,

Both can be extended using the extend keyword.

,

Both can contain static methods.

,

Neither can be instantiated directly.

Question 15

Complete

Mark 1.00 out of 1.00

What is the output of the following code? (Choose all that apply)

```
1: interface Aquatic {
2: public default int getNumberOfGills(int input) { return 2; }
3: }
4: public class ClownFish implements Aquatic {
5: public String getNumberOfGills() { return "4"; }
6: public String getNumberOfGills(int input) { return "6"; }
7: public static void main(String[] args) {
8: System.out.println(new ClownFish().getNumberOfGills(-1));
9: }
```

Select one:

- **a. 6**
- **b.** `The code will not compile because of line 6.`
- **c.** `The code will not compile because of line 8.`
- **d.** `The code will not compile because of line 5.`
- **e.** `The code will not compile because of line 8.`
- **f. 2**
- **g. 4**

The correct answer is:

`The code will not compile because of line 6.`

Question 16

Complete

Mark 0.00 out of 1.00

What will be the output of the program given below?

```
class A
{
        int i,j;
        void showij()
        {
                System.out.println ("i:" + j);
                System.out.println ("j:" + j);
        }
}
class B extends A
{
        int k;
        void showk()
        {
                System.out.println ("k:" +k);
        }
        void sum()
        {
                System.out.println ("i+ j+ k:" +( i + j +
k));
        }
}
class SimpleInheritance
{
        public static void main (String args[])
        {
                A superOb = new A();
                B subOb = new B();
                superOb.i = 10;
                superOb.j = 20;
                superOb.showij();
                System.out.println();
                subOb.i = 7;
                subOb.j = 8;
                subOb.k = 9;
                subOb.showij();
                subOb.showk();
                System.out.println();
                subOb.sum();
        }
}
```

Select one:

a.

```
i : 20
  j : 20
  i : 8
  j : 8
  k : 9
  i + j + k : 24
```

b.

```
i : 8
  j : 8
  i : 20
  j : 20
  k : 9
  i + j + k : 37
```

c.

```
i : 8
  j : 8
  i : 20
  j : 20
  k : 28
  i + j + k : 28
```

d.

```
i : 8
  j : 8
  i : 20
  j : 20
  k : 9
  i + j + k : 24
```

The correct answer is:

```
i : 20
  j : 20
  i : 8
  j : 8
  k : 9
  i + j + k : 24
```

Question 17

Complete

Mark 1.00 out of 1.00

Choose the correct statement about the following code:

```
1: interface HasExoskeleton {
2: abstract int getNumberOfSections();
3: }
4: abstract class Insect implements HasExoskeleton {
5: abstract int getNumberOfLegs();
6: }
7: public class Beetle extends Insect {
8: int getNumberOfLegs() { return 6; }
9: }
```

Select one:

- **a.** It compiles but throws an exception at runtime
- **b.** The code will not compile because of line 4.
- **c.** The code will not compile because of line 7.
- **d.** It compiles and runs without issue.
- **e.** The code will not compile because of line 2.

The correct answer is:

The code will not compile because of line 7.

Question 18

Complete

Mark 0.00 out of 1.00

```
Which statement(s) are correct about the following code?
(Choose all that apply)
public class Rodent {
 protected static Integer chew() throws Exception {
 System.out.println("Rodent is chewing");
 return 1;
 }
}
public class Beaver extends Rodent {
 public Number chew() throws RuntimeException {
 System.out.println("Beaver is chewing on wood");
 return 2;
 }
}
```

Select one or more:

a.

```
 It will compile without issue.
```

b.

```
 It fails to compile because the type of the exception th
e method throws is a subclass of
the type of exception the parent method throws.
```

c.

```
 It fails to compile because the return types are not cov
ariant.
```

d.

```
It fails to compile because of a static modifier mismatch
between the two methods.
```

e.

```
It fails to compile because the method is protected in th
e parent class and public in
the subclass.
```

The correct answer is:

```
 It fails to compile because the return types are not cova
riant.
```

,

```
It fails to compile because of a static modifier mismatch
between the two methods.
```

Question 19

Complete

Mark 1.00 out of 1.00

```
Choose the correct statement about the following code:
1: public interface CanFly {
2: void fly();
3: }
4: interface HasWings {
5: public abstract Object getWindSpan();
6: }
7: abstract class Falcon implements CanFly, HasWings {
8: }
```

Select one:

a.

```
The code will not compile because of line 2.
```

b.

```
The code will not compile because the class Falcon doesn't implement the interface
```

c.

```
The code will not compile because of lines 2 and 5.
```

d.

```
The code will not compile because of line 4.
```

e.

```
The code will not compile because of line 5.
```

f.

```
It compiles without issue.
```

The correct answer is:

```
It compiles without issue.
```

Question **20**

Complete

Mark 0.00 out of 1.00

```
Choose the correct statement about the following code:
1: public interface Herbivore {
2: int amount = 10;
3: public static void eatGrass();
4: public int chew() {
5: return 13;
6: }
7: }
```

Select one:

- **a.** `The code will not compile because of line 4`
- **b.** `The code will not compile because of lines 2 and 3`
- **c.** `The code will not compile because of line 2`
- **d.** `The code will not compile because of lines 3 and 4`
- **e.** `It compiles and runs without issue.`
- **f.** `The code will not compile because of line 3`

The correct answer is:

`It compiles and runs without issue.`