Exam 803 – Sample Questions

1. Given:

```
public class Calculator {
    int num = 100;
    public void calc(int num) {
        this.num = num * 10;
    }
    public void printNum(){
        System.out.println(num);
    }
    public static void main(String[] args) {
        Calculator obj = new Calculator ();
        obj.calc(2);
        obj.printNum();
    }
}
```

What is the result?

A) `20`
B) `100`
C) `1000`
D) `2`

2. Given:

```
public class MyStuff {
    String name;
    MyStuff(String n) {
        name = n;
    }
    public static void main(String[] args) {
        MyStuff m1 = new MyStuff("guitar");
        MyStuff m2 = new MyStuff("tv");
        System.out.println(m2.equals(m1));
    }
    public boolean equals(Object o) {
        MyStuff m = (MyStuff) o;
        if (m.name != null) {
            return true;
        }
        return false;
    }
}
```

What is the result?

A) The output is `true` and `MyStuff` fulfills the `Object.equals()` contract.
B) The output is `false` and `MyStuff` fulfills the `Object.equals()` contract.
C) The output is `true` and `MyStuff` does NOT fulfill the `Object.equals()` contract.
D) The output is `false` and `MyStuff` does NOT fulfill the `Object.equals()` contract.

3. Given:

```
import java.util.*;
public class App {
    public static void main(String[] args) {
        List p = new ArrayList();
        p.add(7);
        p.add(1);
        p.add(5);
        p.add(1);
        p.remove(1);
        System.out.println(p);
    }
}
```

What is the result?

A) `[7, 1, 5, 1]`
B) `[7, 5, 1]`
C) `[7, 5]`
D) `[7, 1]`

4. Given:

```
public class MyLoop {
    public static void main(String[] args) {
        String[] sa = {"tom ", "jerry "};
        for (int x = 0; x < 3; x++) {
            for (String s : sa) {
                System.out.print(x + " " + s);
                if (x == 1) {
                    break;
                }
            }
        }
    }
}
```

What is the result?

A) `0 tom 0 jerry 1 tom 1 jerry`
B) `0 tom 0 jerry 2 tom 2 jerry`
C) `0 tom 0 jerry 1 tom 2 tom 2 jerry`
D) `0 tom 0 jerry 1 tom 1 jerry 2 tom 2 jerry`

5. Given:

```
interface Rideable { String getGait(); }
public class Camel implements Rideable {
    int weight = 2;
    String getGait() { return " mph, lope"; }
    void go(int speed) {
        ++speed; weight++;
        int walkrate = speed * weight;
        System.out.print(walkrate + getGait());
    }
    public static void main(String[] args) {
        new Camel().go(8);
    }
}
```

What is the result?

A) `16 mph, lope`
B) `24 mph, lope`
C) `27 mph, lope`
D) Compilation fails.

6. Given:

```
class Alpha {
    String getType() {
        return "alpha";
    }
}

class Beta extends Alpha {
    String getType() {
        return "beta";
    }
}

public class Gamma extends Beta {
    String getType() {
        return "gamma";
    }

    public static void main(String[] args) {
        Gamma g1 = new Alpha();
        Gamma g2 = new Beta();
        System.out.println(g1.getType() + " "
                + g2.getType());
    }
}
```

What is the result?

A) `alpha beta`
B) `beta beta`
C) `gamma gamma`
D) Compilation fails.

7. Given:

```
class Feline {
    public String type = "f ";
    public Feline() {
        System.out.print("feline ");
    }
}

public class Cougar extends Feline {
    public Cougar() {
        System.out.print("cougar ");
    }
    void go() {
        type = "c ";
        System.out.print(this.type + super.type);
    }
    public static void main(String[] args) {
        new Cougar().go();
    }
}
```

What is the result?

A) `cougar c f`
B) `feline cougar c c`
C) `feline cougar c f`
D) Compilation fails.

Answers

1. A
2. C
3. B
4. C
5. D
6. D
7. B