Vendor: Oracle

Exam Code: 1Z0-808

Exam Name: Java SE 8 Programmer I

Question 51—Question 60

QUESTION 51
What is the name of the Java concept that uses access modifiers to protect variables and hide them within a class?

A. Encapsulation
B. Inheritance
C. Abstraction
D. Instantiation
E. Polymorphism

Answer: A
Explanation:
Using the private modifier is the main way that an object encapsulates itself and hide data from the outside world.
http://www.tutorialspoint.com/java/java_access_modifiers.htm

QUESTION 52
Given the code fragment:

```
abstract class Planet {
    protected void revolve() {              //line n1
    }

    abstract void rotate();                 //line n2
}

class Earth extends Planet {
    void revolve() {                        //line n3
    }

    protected void rotate() {               //line n4
    }
}
```

Which two modifications, made independently, enable the code to compile?

A. Make the method at line n1 public.
B. Make the method at line n2 public.
C. Make the method at line n3 public.
D. Make the method at line n3 protected.
E. Make the method at line n4 public.

Answer: CD
Explanation:
We can't assign weaker privileges in a subclass.
Method revolve() is declared protected in class Planet.
We can declare revolve() as public or protected in class Earth.

QUESTION 53
Given:

```
class Vehicle {
    String type = "4W";
    int maxSpeed = 100;

    Vehicle(String type, int maxSpeed) {
        this.type = type;
        this.maxSpeed = maxSpeed;
    }
}

class Car extends Vehicle {
    String trans;

    Car(String trans) {          //line n1
        this.trans = trans;
    }

    Car(String type, int maxSpeed, String trans) {
        super(type, maxSpeed);
        this(trans);             //line n2
    }
}
```

And given the code fragment:

```
 7. Car c1 = new Car("Auto");
 8. Car c2 = new Car("4W", 150, "Manual");
 9. System.out.println(c1.type + " " + c1.maxSpeed + " " + c1.trans);
10. System.out.println(c2.type + " " + c2.maxSpeed + " " + c2.trans);
```

What is the result?

A. 4W 100 Auto
   4W 150 Manual
B. Null 0 Auto
   4W 150 Manual
C. Compilation fails only at line n1
D. Compilation fails only at line n2
E. Compilation fails at both line n1 and line n2

Answer: E

Explanation:

Compilation fails at n1 because Vehicle hasn't a default constructor
Compilation fails at n2 because this() must be the first statement in constructor body

QUESTION 54
Given the code fragment:

```
1. class X {
2.     public void printFileContent() {
3.         /* code goes here */
4.         throw new IOException();
5.     }
6. }
7. public class Test {
8.     public static void main(String[] args) {
9.         X xobj = new X();
10.        xobj.printFileContent();
11.    }
12. }
```

Which two modifications should you make so that the code compiles successfully?

☐ A) Replace line 8 with `public static void main(String[] args) throws Exception {`

☐ B) Replace line 10 with:
```
try {
    xobj.printFileContent();
}
catch(Exception e) { }
catch(IOException e) { }
```

☐ C) Replace line 2 with `public void printFileContent() throws IOException {`

☐ D) Replace line 4 with `throw IOException("Exception raised");`

☐ E) At line 11, insert `throw new IOException();`

A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

Answer: AC
Explanation:
Add throws clause in both printFileContent and main.

QUESTION 55
Given the following two classes:

```
public class Customer {
    ElectricAccount acct = new ElectricAccount();

    public void useElectricity(double kWh){
        acct.addKWh(kWh);
    }
}

public class ElectricAccount {
    private double kWh;
    private double rate = 0.07;
    private double bill;

    //line n1
}
```

How should you write methods in the ElectricAccount class at line n1 so that the member variable bill is always equal to the value of the member variable kwh multiplied by the member variable rate?

Any amount of electricity used by a customer (represented by an instance of the customer class) must contribute to the customer's bill (represented by the member variable bill) through the method useElectricity method.
An instance of the customer class should never be able to tamper with or decrease the value of the member variable bill.

A)
```
public void addKWh(double kWh) {
    this.kWh += kWh;
    this.bill = this.kWh*this.rate;
}
```

B)
```
public void addKWh(double kWh) {
    if (kWh > 0){
        this.kWh += kWh;
        this.bill = this.kWh * this.rate;
    }
}
```

C)
```
private void addKWh(double kWh) {
    if (kWh > 0) {
        this.kWh += kWh;
        this.bill = this.kWh*this.rate;
    }
}
```

D)
```
public void addKWh(double kWh) {
    if(kWh > 0) {
        this.kWh += kWh;
        setBill(this.kWh);
    }
}
public void setBill(double kWh) {
    bill = kWh*rate;
}
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

QUESTION 56
Given the code fragments:

Person.java:

```
public class Person {
    String name;
    int age;

    public Person(String n, int a) {
        name = n;
        age = a;
    }

    public String getName() {
        return name;
    }

    public int getAge() {
        return age;
    }
}
```

Test.java:

```
public static void checkAge(List<Person> list, Predicate<Person> predicate) {
    for (Person p : list) {
        if (predicate.test(p)) {
            System.out.println(p.name + " ");
        }
    }
}

public static void main(String[] args) {
    List<Person> iList = Arrays.asList(new Person("Hank", 45),
                                       new Person("Charlie", 40),
                                       new Person("Smith", 38));
    //line n1
}
```

Which code fragment, when inserted at line n1, enables the code to print Hank?

A. checkAge (iList, ( ) -> p. get Age ( ) > 40);
B. checkAge(iList, Person p -> p.getAge( ) > 40);
C. checkAge (iList, p -> p.getAge ( ) > 40);
D. checkAge(iList, (Person p) -> { p.getAge() > 40; });

Answer: C

Explanation:

https://docs.oracle.com/javase/tutorial/java/javaOO/lambdaexpressions.html

QUESTION 57

Given the code fragment:

```
public static void main(String[] args) {
    String[][] arr = {{"A", "B", "C"}, {"D", "E"}};
    for (int i = 0; i < arr.length; i++) {
        for (int j = 0; j < arr[i].length; j++) {
            System.out.print(arr[i][j] + " ");
            if (arr[i][j].equals("B")) {
                break;
            }
        }
        continue;
    }
}
```

What is the result?

A. A B C
B. A B C D E
C. A B D E
D. Compilation fails.

Answer: C

QUESTION 58
Given the code fragment:

```
public static void main(String[] args) {
    String str = " ";
    str.trim();
    System.out.println(str.equals("") + " " + str.isEmpty());
}
```

What is the result?

A. true true
B. true false
C. false false
D. false true

Answer: C

QUESTION 59

Given:

```
class CD {
    int r;
    CD(int r){
        this.r=r;
    }
}

class DVD extends CD {
    int c;
    DVD(int r, int c) {
        // line n1
    }
}
```

And given the code fragment:

```
DVD dvd = new DVD(10,20);
```

Which code fragment should you use at line n1 to instantiate the dvd object successfully?

A)
```
super.r = r;
this.c = c;
```

B)
```
super(r);
this(c);
```

C)
```
super(r);
this.c = c;
```

D)
```
this.c = r;
super(c);
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

QUESTION 60

Given the code fragment:

```
int a[] = {1, 2, 3, 4, 5};
for(XXX) {
    System.out.print(a[e]);
}
```

Which option can replace xxx to enable the code to print 135?

A. int e = 0; e < = 4; e++
B. int e = 0; e < 5; e + = 2
C. int e = 1; e < = 5; e + = 1
D. int e = 1; e < 5; e+ =2

Answer: B

Explanation:

This loop prints the array elements with index 0, 2 and 4.

These elements are 1, 3, 5.