

(A)

There are three class files. Class A, Class B (which extends from Class A) and the tester class. Trace the program and show your output. The workings must be shown.

Class A ->

```
class A{
    public int temp = 4;
    public int sum = 1;
    public int y = 2;
    public A(){
        y = temp - 2;
        sum = temp + 3;
        temp-=2;
    }
    public void methodA(int m, int n){
        int x = 0;
        y = y + m + (temp++);
        x = x + 2 + n;
        sum = sum + x + y;
        System.out.println(x + " " + y+ " " + sum);
    }
}
```

Class B ->

```
class B extends A {
    public int x = 1;
    public int sum = 2;

    public B(){
        y = temp + 3 ;
        sum = 3 + temp + 2;
        temp-=1;
    }

    public B(B b){
        sum = b.sum;
        x = b.x;
    }

    public void methodB(int m, int n){
        int y =0;
        y = y + this.y;
        x = this.y + 2 + temp;
        methodA(x, y);
        sum = x + y + super.sum;
        System.out.println(x + " " + y+ " " + sum);
    }
}
```

Tester ->

```
A a1 = new A();
B b1 = new B();
B b2 = new B(b1);
a1.methodA(1, 1);
b1.methodA(1, 2);
b2.methodB(3, 2);
```