

AP Computer Science Practice Exam
Answers Units 6 – 8

Part A – Multiple Choice (50 points)

1. B
2. C
3. A
4. B
5. D
6. C
7. C
8. D
9. D
10. E
11. B
12. A
13. A
14. B
15. B
16. B
17. D
18. C
19. D
20. E

Note: Solutions below are possible solutions. As there are many ways to write a program to solve a problem, your solution may vary and may be perfectly fine, even if it is not exactly what is written below.

```
1.
public class OpenResponse1
{
    public static void main(String [] args)
    {
        Vic v1 = new Vic();
        Vic v2 = new Vic();

        while(v1.seesSlot() && v2.seesSlot())
        {
            if(v1.seesCD() && v2.seesCD())
            {
                v1.takeCD();
                v2.takeCD();
            }
            else if(v1.seesCD() && !v2.seesCD())
            {
                v1.takeCD();
                v2.putCD();
            }
            else if(!v1.seesCD() && v2.seesCD())
            {
                v2.takeCD();
                v1.putCD();
            }
            else
            {
                if(Vic.stackHasCD())
                    v1.putCD();

                if(Vic.stackHasCD())
                    v2.putCD();
            }
        }
    }
}

2.
public int toBeABee(boolean isQueen, boolean isMale, boolean isFall)
{
    if(isMale)
    {
        if(isFall)
            return -1;
        else
            return 2;
    }
    else
    {
        if(isQueen)
            return 0;
        else
            return 1;
    }
}
```

3.

```
public int minEvenOdd(int a, int b)
{
    if(a == b)
        return 0;

    else if (a%2 == b%2)
    {
        if(a > b)
            return a;
        else
            return b;
    }
    else
    {
        if(a > b)
            return b;
        else
            return a;
    }
}
```

4.

```
public int pyramidOfCubes(int n)
{
    int cubes = 0;

    for(int i = 0; i < n; i++)
    {
        cubes = cubes + Math.pow(i, 2);
    }

    return cubes;
}
```