Name: _____   Score: _____

Study the questions before the test is given

1. (5 points) Write a for loop that sums the numbers between 0 and 99 inclusive.

2. (5 points) Given the following code fragment,

```
cout << 'A';

for (loopCount = 0; loopCount < 3; loopCount++)
  cout << 'B';

cout << 'C';
```

The result will be:

      A. the output AC

      B. the output ABC

      C. the output ABBBC

      D. a compile-time error

      E. an infinite loop

3. (5 points) True or False? The statement

```
switch (n)
{
  case 8 : alpha++; break;
  case 3 : beta++;  break;
  default: gamma++; break;
}
```

is equivalent to the following statement.

```
if (n == 8)
  alpha++;
else if (n == 3)
  beta++;
else
  gamma++;
```

A. True

B. False

4. (5 points) Which of the following is not a C++ looping control structure?

     A. while

     B. for

     C. do-while

     D. switch

5. (5 points) What is the output of the following code fragment if the input value is 'G'?

```
cin >> inputChar;
switch (inputChar)
{
   case 'A' : cout << 4; break;
   case 'Q' : cout << 3; break;
   case 'G' :
   case 'M' : cout << 2; break;
   default  : cout << 1;
}
```

6. (5 points) Write a For loop that is equivalent to the following While loop. (All variables are of type int.)

```
count = -5;
while (count <= 15)
{
   sum = sum + count;
   count++;
}
```

7. (5 points) What is the output of the following code fragment? (All variables are of type int.)

```
n = 1;
for (loopCount = 1; loopCount < 3; loopCount++)
while (n <= 4)
n = 2 * n;
cout << n << endl;
```

8. (5 points) After execution of the code fragment

```
char ch = 'C';
int  alpha = 3;

switch (ch)
{
```

```
         case 'A' : alpha = alpha + 10; break;
         case 'B' : alpha = alpha + 20; break;
         case 'C' : alpha = alpha + 30;
    }
```

what is the value of alpha?

9. (5 points) What is the output of the following code fragment? (beta is of type int.)

```
beta = 5;
do
{
  switch (beta)
  {
      case 1 : cout <<'R'; break;
      case 2 :
      case 4 : cout << 'O'; break;
      case 5 : cout << 'L';
  }
  beta--;
} (beta > 1);
cout << 'X';
```

10. (5 points) What is the output of the following code fragment ?

```
loopCount = 0;
cout << 'G';

while (loopCount < 4)
{
  if ( loopCount = 3 )
      cout << 'o';
  loopCount++;
}

cout << 'd';
```

The result will be:

        A. the output God

        B. the output Good

        C. the output Goood

        D. the output Gooood

        E. an infinite loop