

1. What is the output of the following code ?

```
void myFunc(string stringIn);
int main()
{
    string myString = "Hi";
    cout << myString << endl;
    myFunc(myString);
    cout << myString << endl;
    return 0;
}
void myFunc(string stringIn)
{
    cout << stringIn << endl;
    stringIn = stringIn + " there.";
    cout << stringIn << endl;
    return;
}
```

2. What is the output of the following code ?

```
void myFunc(string& stringIn);
int main()
{
    string myString = "Hi";
    cout << myString << endl;
    myFunc(myString);
    cout << myString << endl;
    return 0;
}
void myFunc(string& stringIn)
{
    cout << stringIn << endl;
    stringIn = stringIn + " there.";
    cout << stringIn << endl;
    return;
}
```

3. What is the output of the following code if the user's input is 7?

```
double myFunc();

int main()
{
    cout << "A number and its square are " << myFunc() << endl;
    return 0;
}

double myFunc()
{
    double num, numSquared;
    cout << "Please enter a number: ";
    cin >> num;
    numSquared = num * num;
    return num, numSquared;
}
```

4. Each part of this question refers to the following function:

```
int myFunc(int num, bool foundIt)
{
    if (foundIt)
        cout << num;
    return num++;
}
```

- a. What is myFunc's heading? \_\_\_\_\_
- b. What is myFunc's signature? \_\_\_\_\_
5. a. Can the following three functions coexist in the same program? (Yes or no?) \_\_\_\_\_  
 int myFunc1(int, bool);  
 bool myFunc1(int);  
 double myFunc1(int, bool);
- b. Can the following three functions coexist in the same program? (Yes or no?) \_\_\_\_\_  
 int myFunc2(int, bool);  
 bool myFunc2(int, double);  
 int myFunc2(int);
- c. Can the following three functions coexist in the same program? (Yes or no?) \_\_\_\_\_  
 int myFunc3(int, bool);  
 int myFunc3(int);  
 int myFunc3(bool, int);

6. The parts of this question refer to the following program:

```
#include <iostream>
using namespace std;

int a = 1;
void myFunc();
char myChar = 'T';

int main()
{
    char char2 = 'W';
    cout << char2 << myChar << endl;
    myFunc();
    return 0;
}

int myInt;

void myFunc() {
    double num1;
    cout << "Enter a number: ";
    cin >> num1;
    double num2 = 3.1415;
    cout << num1 + num2 + a;
    return;
}
```

- a. List the names of all local variables in this program: \_\_\_\_\_
- b. List the names of all global variables in this program: \_\_\_\_\_

7. What is the output of the following code?

```
#include <iostream>
using namespace std;

void myFunc();

int main()
{
    int x = 22; //This x is local to main.
    cout << "In main, x = " << x << endl;
    myFunc();
    cout << "In main, x = " << x << endl;
    return 0;
}

void myFunc()
{
    int x = 33; //This x is local to myFunc.
    cout << "In myFunc, x = " << x << endl;
}
```

8. What is the output of the following program?

```
#include <iostream>
using namespace std;

int a = 15, b;
void myFunc();

int main()
{
    int c = 25;
    b = 50;
    cout << a << " " << b << " " << c << endl;
    myFunc();
    return 0;
}

void myFunc() {
    int c = 75, a = 100;
    cout << a << " " << b << " " << c << endl;
    cout << ::a << endl;
    return;
}
```

9. What is the output of the following code?

```
void myFunc();

int main()
{
    myFunc();
    myFunc();
    return 0;
}

void myFunc()
{
    int x = 8;
    static int y = 44;
    cout << x << " " << y << endl;
    x = x / 2;
    y = y / 2;
    cout << x << " " << y << endl;
    return;
}
```

10. If any of the function calls in the following code will produce an error, draw a line through that function call. What is the output of the code, assuming that we remove all error-causing calls?

```
#include <iostream>
using namespace std;

double myFunc(int, double = 33.0, int = 11); //Note default values.

int main()
{
    int count = 22;

    cout << myFunc(2, 4.0, 6) << endl;
    cout << myFunc(3) << endl;
    cout << myFunc() << endl;
    cout << myFunc(count) << endl;
    cout << myFunc(2, 4.0) << endl;
    cout << myFunc(2, , 6) << endl;
    return 0;
}

double myFunc(int a, double x, int b)
{
    return a + x + b;
}
```