Quiz 2

Name (please print):

Q1 (1 pt): If grade has the value of 60, what will the following code display?
   
   ```cpp
   if ( grade >= 60 )
     cout << "Passed";
   ```
   
   a. nothing.
   b. 60
   c. Passed
   d. cout << "Passed";

Q2 (2 pt): What is wrong with the following while loop?
   ```cpp
   while ( sum <= 1000 )
     sum = sum - 30;
   ```
   
   a. The parentheses should be braces.
   b. Braces are required around sum = sum - 30;.
   c. There should be a semicolon after while ( sum <= 1000 ).
   d. sum = sum - 30 should be sum = sum + 30 or else the loop may never end.

Q3 (1 pt): An uninitialized local variable contains:
   a. The value last stored in the memory location reserved for that variable.
   b. No value.
   c. A value of zero.
   d. A randomly assigned value.

Q4 (2 pt): What is the final value of x after performing the following operations?
   ```cpp
   int x = 21;
   double y = 6;
   double z = 14;
   y = x / z;
   x = 5.5 * y;
   ```
   
   a. 8.25.
   b. 5.5.
   c. 5.
   d. 8.

Q5 (1 pt): Which of the following for headers is not valid?
   a. for ( int i = 0; i < 10; i++ )
   b. int i = 0;
      for ( ; i < 10; i++ )
   c. for ( int i = 0; int j = 5; ; i++ )
   d. All of the above.

Q6 (1 pt): switch can be used to test:
   a. int constants.
   b. float constants.
   c. string constants.
   d. all types of constants.

Q7 (1 pt): In C++, the condition ( 4 > y > 1 ):
   a. Evaluates correctly and could be replaced by ( 4 > y && y > 1 ).
   b. Does not evaluate correctly and should be replaced by ( 4 > y && y > 1 ).
   c. Evaluates correctly and could not be replaced by ( 4 > y && y > 1 ).
   d. Does not evaluate correctly and should not be replaced by ( 4 > y && y > 1 ).

Q8 (1 pt): The OR (||) operator:
   a. Has higher precedence than the AND (&&) operator.
   b. Stops evaluation upon finding one condition to be true.
   c. Associates from right to left.
   d. Is a ternary operator.
Q9 (1 pt): The function prototype
double mySqrt( int x );

a. Declares a function called mySqrt which takes an integer as an argument and returns a double.
b. Defines a function called double which calculates square roots.
c. Defines a function called mySqrt which takes an argument of type x and returns a double.
d. Declares a function called mySqrt which takes a double as an argument and returns an integer.

Q10 (1 pt): Which of the following is not true of static local variables?

a. They are accessible outside of the function in which they are defined.
b. They retain their values when the function in which they are defined terminates.
c. They are initialized to zero if not explicitly initialized by the programmer.
d. They can be of type int.

Q11 (1 pt): What happens when two blocks, one nested inside of the other, both declare variables with the same identifier? (Assume that the outer block declares its variable before the opening left-brace of the inner block.)

a. A syntax error occurs.
b. The “outer” variable is hidden while the “inner” variable is in scope.
c. The “outer” variable is irretrievably lost when the “inner” variable is declared.
d. The “inner” declaration is ignored and the “outer” variable has scope even inside the inner block.

Q12 (1 pt): The inline keyword:

a. Increases function-call overhead.
b. Can reduce a function’s execution time but increase program size.
c. Can decrease program size but increase the function’s execution time.
d. Should be used with all frequently used functions.

Q13 (2 pt): When an argument is passed by-value, changes in the called function ________ affect the original variable’s value; when an argument is passed call-by-reference, changes in the called function ________ affect the original variable’s value.

a. Do not, do.
b. Do not, do not.
c. Do, do.
d. Do, do not.

Q14 (1 pt): An array is not:

a. A consecutive group of memory locations.
b. Subscripted by integers.
c. Declared using braces, [].
d. Made up of different data types.

Q15 (1 pt): Which statement would be used to declare a 10-element integer array c?

a. array c = int[ 10 ];
b. c = int[ 10 ];
c. int array c[ 10 ];
d. int c[ 10 ];

Q16 (1 pt): Referencing elements outside the array bounds:

a. Can result in changes to the value of an unrelated variable.
b. Is impossible because C++ checks to make sure it does not happen.
c. Is a syntax error.
d. Enlarges the size of the array.

Q17 (1 pt): Unless otherwise specified, entire arrays are passed ________ and individual array elements are passed ________.

a. By value, by reference.
b. By reference, by value.
c. By value, by value.