**Section One Review Questions:**

1. A \_\_\_\_\_\_\_\_ structure can execute a set of statements only under certain circumstances.

a. sequence

2. A \_\_\_\_\_\_\_\_ structure provides one alternative path of execution.

b. single alternative decision

3. In pseudocode, the if-then statement is an example of a \_\_\_\_\_\_\_\_.

b. decision structure

4. A(n) \_\_\_\_\_\_\_\_ expression has a value of either true or false.

d. Boolean

5. The symbols >, < and == are all \_\_\_\_\_\_\_\_ operators.

a. relational

6. A(n) \_\_\_\_\_\_\_\_ structure tests a condition and then takes one path if the condition is true or another path if the condition is false.

a. If-Then statement

7. You use a(n) \_\_\_\_\_\_\_\_ statement I pseudocode to write a single alternative decision structure.

b. if-then

8. You use a(n) \_\_\_\_\_\_\_\_ statement in pseudocode to write a dual alternative decision structure.

c. If-Then-Else

9. A \_\_\_\_\_\_\_\_ structure allows you to test the value of a variable or an expression and then use that value to determine which statement or set of statements to execute.

d. multiple alternative decision

10. A(n) \_\_\_\_\_\_\_\_ section of a select case statement is branched to if none of the case values match the expression listed after the select statement.

b. default

11. AND, OR, and NOT are \_\_\_\_\_\_\_\_ operators.

b. logical

12. A compound Boolean expression is created with the \_\_\_\_\_\_\_\_ operator is true only if the of is subexpressions are true.

a. and

13. A compound Boolean expression created with the \_\_\_\_\_\_\_\_ operator is true if either of its sub expression is true.

b. or

14. The \_\_\_\_\_\_\_\_ operator takes a Boolean expression as its operand and reverses its logical value.

c. not

15. A \_\_\_\_\_\_\_\_ is a Boolean variable that singles when some condition exists in the program.

a. flag

**Section Two True or False:**

1. You can write any program using only sequence structure

false

2. A program can be made of only one type of control structure

false

3. A single alternative decision structure tests a condition and then takes one path if the conidiation is true, or another path if the condition is false.

false

4. A decision structure can be nested inside another decision structure.

true

5. A compound Boolean expression created with the AND operator is true only when both subexpressions are true

true

**Section Three Short Answer:**

1. Explain what is meant by the term conditionally executed.

Conditionally executed means that something is only performed when a specified condition is true.

2. You need to test a condition and then execute one set of statements if the condition is true. If the condition is false, you need to execute a different set of statements. What structure will you use.

You would want to use the dual decision structure, so that if the statements were true it would do one task and if it was false it would do another task.

3. If you need to test the value of a variable and use that value to determine which statement or set of statements to execute, which structure would be the most straightforward to use?

The structure that would be most straight forward to use would be the nested decision structure.

4. Briefly describe how the AND operator works.

The and operator connects two different pieces of a statement together, so if both are true or false it will act accordingly.

5. Briefly describe how the OR operator works.

The OR operator is used when at least one of your statements you have made is true so it will move on the next action even if only one part is true.

6. When determining whether a number is inside a range, which logical operator is best to use?

You would use >, < or == operators to determine if the number was in the range.

7. What is a flag and how does it work?

Flag variables are used when a condition exists in a program and if the flag is set to true the condition exists and if its set to false the condition does not exist.