Solutions for QUIZ 1 - 15 mins, all questions are 1 point each.

Name: _________________________      Score: _________________________

TRUE/FALSE
1. When an operation is unambiguous and executable, we call it a primitive operation, or simply a primitive of the computing agent carrying out the algorithm.

Answer: True

2. Hollerith’s machines were one of the first examples of the use of automated information processing to solve large-scale, real-world problems.

Answer: True

3. Java and C++ are examples of pseudocode languages.

Answer: False

Pseudocode is an informal high-level description of the operating principle of a computer program or other algorithm. It uses the structural conventions of a programming language, but is intended for human reading rather than machine reading. Java and C++ is the programming language for machine reading.

MODIFIED TRUE/FALSE - if false, need correct answer.
4. According to Norman Gibbs’ and Allen Tucker's definition of computer science, the central concept in computer science is the compiler. _________________________

Answer: False

The central concept in computer science is the algorithm.

5. The statement: “If the mixture is too dry, then add one-half cup of water to the bowl” is an example of a(n) iterative operation. _________________________

Answer: False

The example is a conditional operation.

MULTIPLE CHOICE
6. In computer science terminology, the machine, robot, person, or thing carrying out the steps of the algorithm is called a(n) ____.
   a. computing agent         c. computing representative
   b. algorithmic agent       d. algorithmic representative

Answer: a
7. An algorithm can fall into an infinite loop when ____.
a. the input operations were missing
b. the algorithm uses more than one loop
c. the output operations were missing
d. the continuation condition of the loop never becomes false
Answer: d

8. In the line of code, “Set the value of Area to length*width”, “Area” is a ____.
a. value c. constant
b. variable d. primitive
Answer: b

9. “Print the value of product” is an example of a(n) ____ operation.
a. sequential b. conditional c. input d. output
Answer: d

SHORT ANSWER
10. Briefly describe the concept of iteration (2-3 sentences)
Answer:
The powerful algorithmic concept of iteration means that instead of writing instruction 10,000 separate times, it is far better to write it only once and indicate that it is to be repetitively executed 10,000 times, or however many times it takes to obtain the answer.