44-542 Object Oriented Programming

Exam 1 Part 1 A (2 pts each, 40 pts total)

Write the letter corresponding to the correct answer **on the answer sheet**. Select only ONE answer for each question.

1. A Java program must be compiled before it can be executed.
   1. true
   2. false
2. When you define a Java class named Student, the name of the file that contains the definition must be named
   1. Student.txt
   2. student.java
   3. Student.java
   4. All of the above file names are legal.
3. A Java class can have more than one constructor.
   1. true
   2. false
4. A file with extension .class contains
   1. Java source code
   2. Java bytecode
   3. machine language for an Intel processor
5. Syntax errors are detected
   1. at compile time
   2. during program execution
6. The current state of an object is represented by the values of its attributes.
   1. true
   2. false
7. The behavior of an object is defined using
   1. attributes
   2. constructors
   3. methods
8. Constructors are normally declared to be
   1. private
   2. public
9. A method that modifies the state of an object is called a
   1. accessor method
   2. getter
   3. mutator method
10. Values of type int are objects.
    1. true
    2. false
11. Assume we have declared and initialized a variable sum of type double. Then the value of the variable sum is
    1. a number of type double
    2. a reference to a value of type double
12. To allocate space to store an object, we use which of the following?
    1. create
    2. new
    3. public
13. In a Java class definition, a constructor can call another constructor using the keyword
    1. null
    2. self
    3. this
14. In Java, the notation 'E' represents a String of length 1.
    1. true
    2. false
15. In Java, values of type long are stored using how many bytes of memory?
    1. 2
    2. 4
    3. 8
16. Assume x and y are variables of type int that have both been initialized to legal values. Then the expression x + y always produces the correct value.
    1. true
    2. false
17. Constants are declared using the keyword
    1. const
    2. eternal
    3. final
18. All of the elements in an array must be of the same type.
    1. true
    2. false
19. The input stream associated with the keyboard is called
    1. Scanner.in
    2. System.in
    3. Keyboard.in
20. The rows in a two-dimensional array must all be of the same length.
    1. true
    2. false