

## CS0007: Quiz #4

Name: ANSWER SHEET

### Instructions

Write the **MOST CORRECT** answer for the following questions in the space provided. For example: If "A" and "C" are both correct, and "D" is "both A and C", then answering "D" will get you credit. Answering "A" or "C" will get you **NO** credit.

- 1)   **B**   **What is it called when you write multiple methods in the same class with the same name, but accept different types of parameters?**
  - A. Overriding
  - B. Overloading
  - C. Overwriting
  - D. Overtaking
  - E. Overfilling
  
- 2)   **C**   **A method's signature consists of what two things?**
  - A. Its return type and types of its parameters
  - B. Its return type and name
  - C. Its name and types of its parameters
  - D. Its types of the arguments passed to it and the types of its parameters
  - E. Its types of the arguments passed to it and return type
  
- 3)   **E**   **Hiding an attribute with a local variable is known as what?**
  - A. Data Hiding
  - B. Cloaking
  - C. Obscuring
  - D. Suppressing
  - E. Shadowing

- 4) D **A group of related classes is called what?**
- A. An object
  - B. An API
  - C. A collection
  - D. A package
  - E. A container
- 5) A **Java's `ArrayList` is a combination of what two data structures?**
- A. Array and Linked List
  - B. Array and Skip List
  - C. Array and Binary Tree
  - D. Binary Tree and Skip List
  - E. Queue and Linked List
- 6) D **Which of the following is an advantage of the `ArrayList` data structure?**
- A. You can find an element by its value in constant time.
  - B. You can access any element by its index.
  - C. You can add and remove elements from it.
  - D. Both B and C
  - E. None of the above
- 7) E **To add an item to the end of an `ArrayList`, and to insert an item into the `ArrayList` at a given index which methods do you use?**
- A. `add` and `insert`
  - B. `append` and `insert`
  - C. `add` and `set`
  - D. Two overloaded methods named `insert`
  - E. Two overloaded methods named `add`

- 8) **C** **In order for a program to save data for use when the program is not running, the program must do what?**
- A. Save its data in variables
  - B. Save its data to main memory
  - C. Save its data to secondary storage
  - D. Save its data to a database
  - E. It doesn't need to do anything
- 9) **B** **In class we discussed methods to save data in what kind of file?**
- A. Data file
  - B. Text file
  - C. Database file
  - D. SQL file
  - E. Executable file
- 10) **C** **Which is NOT a class that we discussed for file input and output in this course?**
- A. Scanner
  - B. PrintWriter
  - C. TextWriter
  - D. FileWriter
  - E. File
- 11) **B** **Writing to the end of a file is called what?**
- A. Amending
  - B. Appending
  - C. Annealing
  - D. End-writing
  - E. Attaching

- 12) E **When you give a file's name as an argument, what are you actually giving?**
- A. The entire path to the file, if specified
  - B. The name of the file in which to read and write
  - C. If just the name is given, the path to the directory in which it was compiled
  - D. None of the above
  - E. All of the above
- 13) A **What are methods called that call themselves?**
- A. Recursive methods
  - B. Repeating methods
  - C. Main methods
  - D. Constructor methods
  - E. Static methods
- 14) C **A method that calls itself will keep calling itself unless it has what?**
- A. A control case
  - B. A repeated case
  - C. A base case
  - D. A return statement
  - E. A break statement
- 15) B **Some problems can ONLY be solved recursively.**
- A. True
  - B. False