CSci 365: Organizations of Programming Languages

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Assignment 9 (chap. 11 & 12): 60 points**

Q1. [10] Explain the similarities of and differences between Java packages and C++ namespaces.

Q2. [10] Describe the three ways a client can reference a name from a namespace in C++.

Q3. [10] Compare Java’s packages with Ruby’s modules.

Q4. [10] Explain the ways subclasses can be created that are not subtypes in C++ and in Java, respectively.

Q5. [10] Compare the class entity access controls of C++ and Java.

Q6. [10, optional] What exactly does it mean for a subclass to have an is-a relationship with its parent class?

Q7. [10] Compare the access controls for instance variables in Java and Ruby.