

CIS 3270 Java Basics Test Fall 2006

First, use the learning outcomes as a guide for your review of the subjects.

The test will be open book and open notes. You will have 75 minutes to finish the test. You can only refer to the textbook, lecture notes/slides and examples during the test. You cannot use computer.

The test will have the following type of questions:

1. Multiple choices
2. Filling blanks
3. Correcting mistakes
4. Program writing

There will be no curving. So, be well prepared for the test. Don't wait until the test time to begin reading and reviewing.

Java Basics Learning Outcomes

1. Basics
 - Understand Java's features of object-oriented, platform independent and interpreted
 - Be familiar with these acronyms and concept: JVM, JRE, J2SE, J2EE, JDK, IDE, SDK, Bytecode
2. Language basics
 - Data types and their usage: especially int, double, char and boolean
 - Variable naming, declaration, assignment; constants
 - Operators: arithmetic, relational, conditional, assignment and other types
 - Control flow statements: if, switch, for, while and their variations
3. Object oriented programming
 - Concepts of class, object, state (attribute/property), behavior, message
 - Creating and using classes/objects
 - Declaring and using member variables
 - Defining and using methods, including with/without parameters, with/without return value
 - Variable scope; override; "this" keyword
 - Defining and using constructors
 - Method overloading and constructor overloading
 - Encapsulation principles and practices; access modifiers: public, (default) and private
 - Aggregation concepts, practices and implementations in Java
4. Be familiar with the use of following classes and their typical methods
 - String
 - Math
 - Formatting numbers: DecimalFormat
 - Arrays