

COSC 211: Programming Data Structures
Fall 2013

Final Exam Notes

Date: Monday, December 16

Time: 11:30am – 1:00 pm

(NOTE: Exam starts an hour earlier than regular class times.)

Format:

Part I: Closed notes, closed textbook

- A. True or False (20 points)
- B. Short Answers (30 points)

Part II: Closed notes, closed textbook.

- C. Problem Solving (50 points)

Notes:

1. The web browser can be opened only on the Exam pages and the Java 7 API Oracle web site
2. You may use Eclipse to develop your answers
3. All previous Eclipse projects cannot be accessed during the exam. You are expected to use a new workspace on Eclipse.

Coverage: Chapter 1 – Chapter 15

Highlights:

- Binary File IO
 - ObjectOutputStream and FileOutputStream classes
 - ObjectInputStream and FileInputStream classes
 - Thrown exceptions: FileNotFoundException, IOException, EOFException
- Random Access to Binary Files
- Recursion
 - Recursive method definition
 - void recursive methods
 - Recursive methods that return a value
- Interfaces and Inner Classes
 - “implements” vs “extends”
 - interfaces vs abstract classes
 - Comparable, Serializable, Cloneable interfaces
 - anonymous classes
- Linked Data Structures

- Singly-linked lists
- Doubly-linked lists
- Iterators
- Generic Linked Lists