CITC1310 – Final Exam Review Questions

- 1. What is a method?
- 2. What are parameters?
- 3. What are arguments?
- 4. How are arguments passed in Java?
- 5. Be able to identify the parts of a method signature.
- 6. What is method overloading?
- 7. What are the rules about method overloading?
- 8. What is scope?
- 9. Why do we use methods?
- 10. What is an object? (What two things do objects have?)
- 11. What is the difference between static and non-static methods?
- 12. What are classes? How do they relate to objects?
- 13. What is a constructor?
- 14. What is the minimal set of constructors that a class should provide?
- 15. What are the two main design goals in OOP, and what does each mean?
- 16. What are the access modifiers in Java, and what do each do?
- 17. What access modifier should be used for variables?
- 18. What access modifier should be used for most constructors and methods?
- 19. What does the following code create?

PhoneRecord record;

- 20. How do you instantiate an object?
- 21. In what area of memory are objects created?

- 22. What happens when an object has no references?
- 23. Be able to write code for a simple class.
- 24. Be able to write code which creates and uses an object.
- 25. What is the purpose and syntax of each of the following UML diagrams:
 - Class Diagram
 - Object Diagram
- 26. What is aggregation and composition? Be able to provide an example of each and/or identify which is at play.
- 27. How is aggregation represented in a UML diagram?
- 28. How is composition represented in a UML diagram?
- 29. What are the steps in the object oriented analysis and design process?
- 30. Given a sample problem, be able to carry out the OOAD and draw appropriate UML diagrams.
- 31. How do you declare arrays?
- 32. How do you instantiate arrays?
- 33. Is an array an object?
- 34. What is the minimum index in an array?
- 35. What is the maximum index of an array?
- 36. What is a foreach loop used for? What is its syntax like?
- 37. Be able to write a foreach loop.