

University of Zambia

School of Natural Sciences

Department of Computer Science

CSC2000 Test 2

Duration: 1hr:30mins

Answer all questions.

Section A [5 marks each question]

1. In Java programming an object is said to have both state and behavior. What does Java use to define state and behavior?
2. What are the basic steps into creating an Object? Write sample code to show this.
3. What is constructor overloading?
4. What is garbage collection and how can a programmer destroy an object?
5. Which class or interface defines the `wait()`, `notify()` and `notifyAll()` methods?
6. What method must be defined by a class implementing the `java.lang.Runnable` interface?
7. Write code for two types of valid constructors for Thread class.
8. What is class abstraction and encapsulation?
9. What is association, aggregation and composition?
10. What is inheritance?
11. What is the relationship between a super class and a subclass?
12. What is the difference between method overloading and overriding?
13. How does method matching differ from method binding?
14. What are exceptions and why are they important in programming?
15. What is the major difference between checked and unchecked exceptions?
16. Why is Java GUI programming using AWT prone to platform specific bugs?
17. How does the binding property in JavaFX work?
18. What are the three methods for executing SQL queries using java?
19. What makes prepared statements for java database programming special?
20. What is the importance of the Java DatabaseMetadata Interface?

Object object; Object object = new Object();
object = new Object();
this.object