ELIZADE UNIVERSITY, ILARA MOKIN
FACULTY OF BASIC AND APPLIED SCIENCE
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

FIRST SEMESTER EXAMINATION 2020/2021 SESSION

HOD's SIGNATURE

COURSE TITLE: OBJECT ORIENTED PROGRAMMING
COURSE CODE: CSC 303

INSTRUCTIONS: Answer Any Four Questions   Time Allowed: 2 Hours

1. (a) Explain orthogonality and readability as criteria for evaluating programming languages
   (b) Differentiate between programming paradigm and programming domain
   (c) State and explain 6 basic concepts that are associated with OOP.

2. (a) What is the technical implication of data types and declarations in a programming?
   (b) State and explain the 3 attributes of Java objects?
   (c) What are two types of polymorphism? Explain them

3. (a) Explain why a Java program may offer more security than a Python program
   (b) A simple binary tree test runs ten times faster in Java than in Python. Explain what is responsible for this difference in performance.
   (c) State and explain any 4 types of inheritance in Java

4. (a) Explain adequately the relationship between JVM, JRE, and JDK as components of the Java language architecture
   (b) All programming languages implement translation of source code into machine code, but not necessarily in identical ways. Describe how Java and Python approach the translation process.
   (c) Java does not support multiple inheritance by default. Explain how you can achieve multiple inheritance in Java

5. (a) Differentiate between multi-level inheritance and multiple inheritance.
   (b) What is a constructor?
   (c) State and explain 3 types of constructors?

6. (a) State, in simple terms, why the Python Language is significant.
   (b) Explain how Java and Python implement abstraction
   (c) Why is multiple inheritance not supported in Java?