Object Oriented Programming set-6

Mid Semester Exam

# Instructions

1. This is a **closed book online proctored** exam.
   1. You should not refer to books, notes or online resources.
   2. You should not discuss questions or answers with anyone (including outsiders)
   3. You should have your camera and microphone **ON** at at all times and no headphones
2. Write the solutions clearly and legibly in A4 sheets, using pen (NOT pencil) and at the end of the exam you should submit the scanned copy of your solutions as explained by the faculty
3. Follow all other instructions given by the faculty during the exam

# Descriptive Questions (10 Marks each)

*Note: For programs add comments for any assumptions made*

1. Create a class Student with instance variables (name, studentid, questions-attended). The attribute questions-attended is an integer to keep track of the number of questions attended by the students. Create another class StudentMain which will contain the public static void main method. In main, you should create at least three student instances (random names and questions-attended hardcoded). Create one or more static variable(s) in Student class. You should keep track of all instances created in that static array. Create another static method in Student class, for computing the average questions-attended based on the instances in the array.
2. Write a java program with the classes:
   1. Shape
   2. Circle extends Shape

Demonstrate the different ways of using super keyword with the above classes.

Add comments appropriately to explain your logic.