

Department of Physical Science
In-Course Assessment Examination –I
IT1214-Object-Oriented Design and Programming (Practical)
Answer all questions

Time: One hour and 15 minutes

December 2021

1. Write a Java program to input the amount of rainfall (mm) recorded each day for a week (7 days, once per day). The output is the highest rainfall and the average (mean) rainfall for the week.

[30%]

2. The management of a company wishes to keep information on its employees. The proposed **Employee** class has the following instance variables:

–**employeeName: String**

–**age: Integer**

–A **class variable** is also required, called **employeeCount**, which will be incremented each time an Employee instance is created.

Write Java program to perform the following:

- I. Show the declaration of the **Employee** class, including any setter and getter methods.
- II. Declare two constructors as follows:
 - a. Both constructors should increment the class variable appropriately.
 - b. The first is a default constructor that has no parameters and sets the instance variables with default values.
 - c. The second takes 2 parameters, one for each of the instance variables.
- III. Show how both constructors could be used to instantiate an object using **EmployeeDemo** class.

[70%]