

## **United International University**

Department of CSE

Midterm Examination

Summer 2022

CSI 212: Object Oriented Programming Laboratory

Section: B

Time: 50 + 10 Minutes Total Marks: 15

[N.B.: Answer all the questions. Assume any data if it is not mentioned explicitly. Any examinee found adopting unfair means will be expelled from the trimester/program as per UIU disciplinary rules]

1. Suppose your client want from you to get a cricket academy management system. By using the system your client will be able to manage the activities of the academy easily.

Create a class named **PlayerInfo** inside of the **player** package. **PlayerInfo** class should have **pName**, **pId**, **pBalance** and **pExperience** instance variables. Your client wants to keep **pBalance** and **pExperience** private. There should be some methods to get and set(parameterized) the values of those private variables. **PlayerInfo** does also have a constructor with four parameters to initialize the instance variables. **PlayerInfo** also have few methods **updateId** and **updateName()** (parameterized). There should be also a non-parameterized **play()** method which will reduce the **pBalance** by 100 and increase the **pExperience** by 5 if the paly() get called and the player has sufficient balance.

2. Create another class named **PlayerInfoV2** that inherits/extends the **PlayerInfo** class. **PlayerInfoV2** also have the non-parameterized **play()** method which will reduce the **pBalance** by 150 and increase the **pExperience** by 10 if the paly() get called and the player has sufficient balance.

Now crate another class named **Main** inside of the **default/src** package. From the main class create an array of object of the **PlayerInfoV2** class. The array size and the instance variables' values of each object will be user defined. Show the utilization of all of the **constructors** and **methods** that you have written inside of the both **parent** and **child** classes. Also print the person's name who has the second maximum **pExperience**. [10]