

**UNITED INTERNATIONAL UNIVERSITY (UIU)**

Dept. of Computer Science & Engineering

Trimester: Summer 2024

Course No: CSE 1115 Title: Object Oriented Programming

Section: E Class Test-2

**Time: 20 minutes Marks: 20**

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| **Name** |  | **ID** |  |

Assume there is a Java Class called **BankAccount**. This class has three private members: **(id:String), (name:String)** and **(balance:double)**. It also has a parameterized constructor, two methods **deposit(double amount)** and **withdraw(double amount)** and necessary getter-setters. **You don’t need to write this class. [10+10]**

* Write a child class of **BankAccount** called **CurrentAccount.** Write a constructor matching the superclass. Override the withdraw() method so that for every withdrawal of 5000 or more, 10 Taka charge is also deducted from the account and for amounts less than 5000 there is a 5 Taka charge. You must use a call to superclass withdraw method.
* Create another subclass **StudentAccount** which has a private member variable **(loanAmount:double).** Write two overloaded methods **takeLoan(double amount)** and **takeLoan().** Students are permitted to take a loan not exceeding 5 times their current balance. If a previous loan exists show an error message. If no loan amount is provided in the parameter apply for the maximum available loan amount.



