

United International University

CSE 1116 - Coding Test 1 - Set A

Write your name and ID on the question paper. Marks are on the right. Return question.

Q1a) Create a class named **BankAccount that has the following four attributes. [3]**

- bankName (final String)
- accountName (String)
- balance (double)
- accountNumber (int)

b) Create **two constructors:**

- i) The first constructor is a default constructor that only prints “**Welcome to the Bank Account System**”. Set the **balance** to **0.0** and **accountName** to “**NEW**” [2]
 - ii) The second constructor will take three parameters named accountNumber, accountName, and balance and initialize the instance variables using this reference. The constructor will print out “**Welcome to the Bank Account System**” and the **current information of the account**. [3]
- c) Create **1 initialization block** that will set the **bankName** to “**INVALID**” and **print** “**Initiating Banking Protocol**”. [2]**
- d) Create **1 static block** that will **print** “**Entering Bank Universe**”. [2]**
- e) Create **the** following methods:**
- **Deposit(double amount): Add** the amount to the **balance** and **print a message** indicating the amount deposited. [3]
 - **Withdraw(double amount): Subtract** the amount from the balance if **sufficient funds** are available; otherwise, print a message indicating **insufficient funds**. [3]
 - **DisplayAccountInfo(): Display detailed information** about the bank account. [2]
 - **TransferMoney(BankAccount b, double amount): Transfer** the given amount to the **BankAccount b** given in the parameter, also keep **check for insufficient balance** and **print a message** if insufficient. You should **utilize the above functions** for this task. [3]

f) Do the following tasks:

- Create another class named **Bank**. This class contains the **main** method of the file. [1]
- Create two instances of **BankAccount** objects for two different constructors. [1]
- Perform the following tasks:
 1. Deposit money into an account [1]
 2. Withdraw money from an account [1]
 3. Transfer money from a BankAccount to another [1]
 4. Display account information after each operation [2]