**BITS PILANI, DUBAI CAMPUS**

**DUBAI INTERNATIONAL ACADEMIC CITY, DUBAI**

**FIRST SEMESTER 2021 – 2022**

**COURSE:** F213 (Object Oriented Programming)

**COMPONENT:** Practical Sheet 4 **DATE:** 26th September 2021

**Q.1**

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| **CreditCard**  Data:  -String name,  -String cardNo,  -boolean enabled,  -int pin,  -String expiryMonth,  -int cardType, (Platinum =3, Gold =2, Silver =1),  -int currentCredit,  int creditLimit.  Methods:  +CreditCard()  +changePin(int newPin)  +transact(int amt),  +changeCardStatus(boolean status)  +display()  Note:   1. – indicates private access specifier, + indicates public access specifier 2. transact() should check if the card is enabled + pin + credit limit. 3. Further based on the card type a discount is offered   3% for platinum, 2% for Gold and 1% for Silver. |
| Create a class CreditTester to include main method. Create objects of CreditCard in this main method and work on functionalities.  1 $vi CreditCardTester.java |
| class CreditCard {  }  public class CreditCardTester {  public static void main(String[] args) {  // Read Input from user. and test the CreditCard class.  }  } |
| $javac CreditCardTester.java  $java CreditCardTester |

**Q.2**

**Employee**

**Data:**

-Id: String

-name: String

-dept: int

-basic: float

-allowance: float

-totalSalary: float

**Method:**

+Employee()

+calculateSalary()

+displayDetails()

Write a Java Program to declare any class named Employee with the given attributes. Create another class which has main method. Create atleast 3 objects of the class employee, using constructor pass the user input values to assign to attributes.

1. Calculate salary using the rule:

Total salary is basic salary + HRA +Allowance

**Note:**

**Dept:** 1 for staff, 2 for accounts, 3 for admin

**HRA=**40% of basic salary

**Allowance** = 1500 for Dept 1

2500 for Dept 2

3500 for Dept 3

1. Print details of the object.