|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| final design | **Course:** | **OOAD Lab** | **Course Code:** | **CS-309** |
| **Program:** | **BS(Computer Science)** | **Semester:** | **Fall 2018** |
| **Duration:** | **90 minutes** | **Total Marks:** | **50** |
| **Quiz Date:** | **16-Oct-2018** | **Weight** | **5** |
| **Section:** | **F** | **Page(s):** | **1** |
| **Exam:** | **Quiz 1** | **Roll No:** |  |

**If you find any confusion in the statement, make suitable ASSUMPTIONS and mention it as comment at the start of your code. Do not ask your instructor.**

**Question # 1 (50)**

Your task is to implement a system for Fast Cafeteria. Students can purchase food or can get food on loan and get their pending sum written by cafe owner. There are three types of food i.e. Beverages, Bakery Items and Desi Food.

Desi food will have a menu and will only be served during lunch timings i.e. 1 - 3 P.M

If a student doesn't return his pending sum within a week He gets fined 10% of his sum per day.

The cafe owner needs a system to handle all these queries. Maintaining inventory (stock) of items on daily basis. If any inventory is missing the supplier comes and supplies certain quota. Keeping track of sale, purchase and student loan.

* **Make Complete Class Diagram by identifying obvious and non-obvious classes’ names and draw relationships among classes.**
* **Then perform implementation in JAVA according to your design.**
* Marks will be deducted if there is a mismatch between design and implementation.
* Use StarUML for this part.
* *Make separate .java file for each class.*

**Submission Method:**

1. Create a folder name as your roll no (XXL-XXXX).
2. Put all JAVA files and your UML diagram in that folder.
3. Submit that folder on slate.