**Assignment 2**

**EEL318 – Digital Hardware Design**

Date of Assignment: 22/02/2021                     Submission Deadline: 28/01/2021

Question 1: Design a Vending machine for the following specifications:

1.  The vending machine accepts coins of three denominations which are INR 5, 10, and 20.
2.  The number of items that the machine have should be decide by the last digit of your roll number. For example if your roll number is 2017UEE0017 then the number of items will be 10 + 7 = 17. if the last digit is 0 in that case the number of items should be 10 + 0 = 10.
3.  The machine should return the excess amount along with the item dispensed if the value of coins inserted in the machine exceeds the value of the item.
4.  You should divide the item in three cost categories of INR 5, 20, and 35.
5.  Add adequate comments in your VHDL code for readability.
6.  Do not copy your code from internet or some other source. If your code is found plagiarized a fail grade will be assigned and strict disciplinary action will be taken.