Ahsanullah University of Science and Technology

Course No: CSE3110   **Course Name:** Digital System Design Lab

Semester: Fall20   **Date:** 11.9.2021

Marks of each question is given in the right side of every question.

TIME: 15+10 mins

Instruction:
Select your set by last 3 digit of your roll mod 4.
For example, if your roll is 180204200, you should answer the set (200 mod 4) = Set 0.
Please note that you won't get any marks if you do not answer the correct set.

Set 0	
1. a) Find the value of (**-22) X 25** using booth's algorithm where **x= 6, y =6** using **u, v, x** method.	08
b) How many '**only**'shift operations are needed for the operation in 1(a)?	02

Set 1	
1. a) Find the value of **28 X (-30)** using booth's algorithm where **x= 6, y =6** using **A, S, P** method.	08
b) How many **'only'** shift operations are needed for the operation in 1(a)?	02

Set 2	
1. a) Find the value of **21 X (-24)** using booth's algorithm where **x= 6, y =6** using **u, v, x** method.	08
b) How many addition operations are needed for the operation in 1(a)?	02

Set 3	
1. a) Find the value of **21 X (-24)** using booth's algorithm where **x= 6, y =6** using **A, S, P** method.	08
b) How many addition operations are needed for the operation in 1(a)?	02