

**University of Asia Pacific**  
**Department of Computer and Science**  
**CSE 315 (Peripheral and Interfacing)**

**Full Marks: 20**

**Writing Time: 30 minutes**

**Upload Time: 05 minutes**

**Instructions:**

- a. Please write the answers on your copy (hardcopy) and make it a PDF. Upload the PDF on the assignment named “Quiz-3 Copies” I have created in the Google Classroom.
- b. While giving exam you must switch your camera on.
- c. If you are unable to switch on the camera you will face a viva shortly on the same syllabus. Marks distribution in that case will be decided on your performance.

**1.** Design a **Full adder** and **Full subtractor** in a single circuit which will contain selector, and we will be able to select the operation through switch **S**. [**S** could be 0 (LOW) or 1 (HIGH)] If we input ‘0’ it will perform Addition operation and if we input ‘1’ it will perform Subtraction operation. 10

**2.** Take last three digits of your registration number and take the last bits of each number. Like, if your ID is 1720789 then last three digits are 7, 8, and 9 convert each number to its corresponding binaries and take last bits of each [7=011**1**, 8=100**0**, 9=100**1**] here, the last three bits are **1,0,1** show the addition operation on the digits you get. Proof through the truth table that, your answer not wrong. 10