Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Course yr. and section: \_\_\_\_\_\_\_\_\_ Instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Laboratory Work No.8

**KINEMATICS**

I. Objectives

To familiarize with Forward and Inverse Kinematics use in robotics applications.

To simulate the design a circuit using Arduino simulator.

II. Materials

TinkerCAD Arduino simulator

III. Problem

Instruction: Upload the video simulating the circuit on the week tab of the courseware and paste your codes on the box provided after each problem.

1. Create a program and design a circuit that will rotate 2 servo motors in DIGITAL pins 9 and 10 shows the Forward Kinematics. In serial monitor it should display the angles of both servo motors.

2. Create a program and design a circuit that will rotate 2 servo motors in DIGITAL pins 9 and 10 shows the Forward Kinematics. In serial monitor it should display the angles of both servo motors.

IV. Discussion

V. Conclusion