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

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

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

Laboratory Work No.2

**DC MOTOR ENCODER**

I. Objectives

To know the operation and utilize of DC Motor Encoder in a circuit.

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 a DC motor encoder using DIGITAL pins 9, 10, 11. In serial monitor it should display the rpm and distance traveled by the motor. The DC motor is connected to the motor driver using L293D.

2. Create a program and design a circuit that will rotate a DC motor encoder using DIGITAL pins 9, 10, 11. In serial monitor it should display the rpm and distance traveled by the motor. The DC motor is connected to the motor driver using L293D.

IV. Discussion

V. Conclusion