## Sohag University Electrical Engineering Dept.

## ASSIGNMENT

Faculty of Engineering Electric Tests (A)

- 1) Execute an Arduino sketch to simply turn a led on and off, the LED is connected to pin 13 and is blinked every 3 seconds.
- 2) Execute an Arduino sketch to simply read a switch connected to pin 2 in order to control a led connected to pin 13.
- **3)** Execute an Arduino sketch to simply brighten and dim a led connected to any PWM pins.
- **4)** Execute an Arduino sketch to model traffic lightening system using red, yellow, and green LEDs.
- 5) Execute an Arduino sketch that use LDR sensor to control the lighting of a led connected to pin 13.
- 6) Execute an Arduino sketch to simply turn led on if you press '1' in keypad and off when you press '0'.
- 7) Execute an Arduino sketch to turn led on if an ultrasonic sensor is more than 15 cm from an object.
- **8)** Execute an Arduino sketch to automatically change a servo motor angle from 0°: 30°:180° and vice versa.