## ESIOT LAB submission in the Shared folder

- 1. Study of Raspberry-Pi, Beagle board, Arduino and other micro controller ( History & Elevation) (word or PDF)
- 2. Study of different operating systems for Arduino / Raspberry-Pi /Beagle board. Understanding the process of OS installation on Raspberry-Pi /Beagle board (word or PDF)
- 3. Study of Connectivity and configuration of Arduino /Raspberry-Pi /Beagle board circuit with basic peripherals, LEDS. Understanding GPIO and its use in program. (Word or PDF)

## Following experiment should be submitted using Tinker cad platform using Arduino.

- 4. HC- SR04 Ultrasonic Module (video with explanation)
- 5. IR Infrared Obstacle Avoidance sensor (video with explanation)
- 6. Soil Moisture Sensor (video with explanation)
- 7. Microphone sensor(video with explanation)
- 8. Digital Barometric Pressure Sensor(video with explanation)
- 9. Photoresistor sensor(video with explanation)
- 10. Digital thermal sensor Temperature sensor(video with explanation)
- 11. MQ-2 Gas sensor
- 12. (PIR sensor)motion sensor
- 13. Humidity and Rain Detection sensor
- 14. Passive Buzzer Module
- 15. Speed sensor Module
- 16. IR Infrared Flame Detection sensor
- 17. 5V 2- Channel Relay module
- 18. HC- SR501 Pyroelectric Infrared Sensor
- 19. Accelerometer Module
- 20. DHT11 Temperature and Humidity sensor

## Last Date for submission is 30th May 2021

## Evolution for Term work will be done on the basis of following

- a) Theory and practical attendance.
- b) Quality of submission of video and Explanation
- c) Sharing the video using lesser size.