## **Elective Course: Internet of Things**

## Assignment#2

Submit the source code along with the comments describing the logic, and screen prints(outputs) for the following tasks.

1) Develop a Python GUI application for Implementing the MQTT subscribe operation to the given demo MQTT publish operation using Thingspeak Cloud.

Connect either to 1) Raspberry Pi + Arduino+ Digital Temperature Sensor(KY028) (OR) 2) Raspberry Pi+DHT11 Sensor. (Steps to connect Raspberry Pi remotely is given during the interactive session).

- 2) Develop a Restful API application to collect, store the DHT sensor data and run the application on a RPi.
- 3)Develop a Python GUI application to collect and store sensor data locally in the MySQL DB (LAMP stack installed in the Raspberry Pi). Connect to Raspberry Pi+DHT11 Sensor. (Steps to connect Raspberry Pi remotely is given during the interactive session).
- 4)Develop a program to perform image classification task by capturing the images using RPi using Tensorflowlite.

Last date for submission:15-April-2023