## **IoTEDU Assignment 2 (50 Marks)**



**Deadline for Submission: 13<sup>th</sup> March 2021** (Answers will not be accepted after 13<sup>th</sup> March)

Send the answers in a PDF format with your Full Name

Passing score: 27.5 out of 50

## **MQTT**

- 1. What are the different Messaging protocols used in IoT? Name any five and discuss briefly. (5 marks)
- 2. What are the various MQTT Brokers available open-source. Mention any five and discuss briefly. (10 marks)
- 3. Publish a message "Hello, I am {your name}" via the mosquitto broker, subscribe to the same message, and attach a **screenshot** of both the publish and subscribe terminal. (10 marks)

Linux (attach the screenshots wherever needed)

- 1. What is the command used for installing a software package in Raspberry Pi? Attach the **screenshot** of your installation. (5 marks)
- 2. Create the following commands. (10 marks) Attach screenshots.
  - i) 3 folders/directories in your home directory
  - ii) In each of the directory, create a text file and place it inside them.
- 3. What is the difference between the commands "ll" and "ls"? What are their functionalities? (5 marks)

## Raspberry Pi

1. Name 5 different Operating Systems used for Raspberry Pi. Briefly describe them. (10 marks)

**Bonus Question** 

Write the list of Linux commands and their functionalities along with screenshots in your terminal (any 10)  $\rightarrow$  10 Marks