

## Report on Workshop on Internet of Things (IoT), 28th and 29th October-2017

(Dept. of Electronics & Tele. Comm. Engg., MGMCET, Kamothe, Navi Mumbai)

## A. Workshop Background Information & Objectives:

The Internet of Things ('IoT') – all-embracing heterogeneous networks of smart devices hyper-connected with each other via the Internet – is on the rise and will become reality within the next five years. The decisive change accompanying the IoT will be its ubiquity: networked devices are everywhere. Like any technological progress, this development offers social and economic opportunities, but at the same time it also harbors risks and detrimental impact. Notably, the IoT is transforming and disrupting our daily lives faster than any other technology before.



The aim of workshop to discuss real life use cases on IoT application and make the session really interactive by providing an opportunity to suggest a solution to real life scenario also has been include to discuss some bonus: IoT demo applications with raspberry Pi board. Day ended with the demonstration of live project such as temperature monitoring.

## **B.** Summary:

On 28<sup>th</sup> and 29<sup>th</sup> October 2017, Department of Electronics and Telecommunication Engg. MGM's college of Engineering and Technology has conducted a workshop on future topic IoT. It is associated with **Robokart**, **Innovation cell IIT Bombay** and **IETE** Mumbai Chapters.

The main headlights of the workshop are given below:

- Different types of Arduino board such as Arduino Uno, Arduino Uno R3 SMD, Ardino Pro 3.348 MHz , Arduino mini , Aurdino Ethernet and there characteristics ( Power supply, clock speed, Digital I/O, Analog Input, PWM modulation and different kinds of interfacing.
- Wi-Fi module Programming with Arduino.
- Interfacing of sensors and uploading data on cloud.
- For Interfacing different types of sensors with Arduino and Arduino with data base ,different programming steps have been discussed (function, statement ,control statement levels variables, math, pin mode, serial mode, digital mode variable, delay and for loop )
- Interfacing and controlling various devices like LED, motors, sensors etc with Arduino.
- Four examples have been taken as a hands-on such as LED glow, Switch sensing, Temperature display, small motor controlling.
- Total 55 students have participated.
- At valedictory ceremony, the participants were awarded the certificates and provided with the kit to continue their journey with IoT. Also competitive handson problem has been given to the students they performed very well and two groups have been identifying for extra ordinary effort. The ceremony and function came to an end with a group photo session.





Submitted by:

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