A Three Day Workshop on "Internet of Things"

The workshop conducted by ECE department on 23rd – 25th January 2019 in

RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS in

association with

ESF Labs Pvt Ltd, Vijayawada

Report of Workshop on Internet of Things:-

The Department of Electronics & Communication Engineering, RISE Krishna Sai Prakasam Group of Institutions organized "Three days Workshop on "**INTERNET OF THINGS**" during 23/01/2019 to 25/01/2019.

"If you think that the internet has changed your life, think again. The IOT is about to change it all over again!"

Internet of Things is a new revolution of the Internet. A world where the real, digital and the virtual are converging to create smart environments that make energy, transport, cities and many other areas more intelligent. A device become a smart device is called IOT. Now a days there are many android and server based application.

All the faculty and staff members actively participated in the event to make it a grand success.

Detail Report of Workshop:

Title: Internet of Things

Resource person: P.Thirumala Rao

About workshop: (What is Internet of Things?)

It's a global network infrastructure, linking physical and virtual objects using cloud computing, data capture, and network communications. It allows devices to communicate with each other, access information on the Internet, store and retrieve data, and interact with users, creating smart, pervasive and always-connected environments.

The Internet of Things (IoT), sometimes referred to as the Internet of Objects, will change everything— including ourselves. This may seem like a bold statement, but consider the impact the Internet already has had on education, communication, business, science, government, and humanity. Clearly, the Internet is one of the most important and powerful creations in all of human history. Now consider that Internet of Things represents the next evolution of the Internet, taking a huge leap in its ability to gather, analyse, and distribute data that we can turn into

information, knowledge, and, ultimately, wisdom. In this context, Internet of Things becomes immensely important.

Duration: It's a Three day workshop From 23/01/2019 to 25/01/2019 In this Three-day course, student gained valuable hands-on experience.

How many students have attended this workshop: 98

Topics covered in this Workshop:

Day 1

1. Introduction to Embedded System
2. Introduction to 8051 family
3. Arduino programming
4. Interfacing of seven segment Display with Arduino
5. Interfacing of sensors like LDR with Arduino

Day 2

1. Introduction to IOT
2. Introduction to Rajberry pi
3. Rajberry pi Board Explanation
4. Formatting SD card and Installing operating System
5. Controlling of GPIO Pins and Control LEDs with buttons on GPIO Pins

Day 3

1. Interfacing of Sensors(ultrasonic and Humidity Sensors) with Rajberry pi
2. Interfacing of wire and wireless connectivity (RFID, Bluetooth, Humidity Sensors) with Rajberry Pi
3. Mini Project

Skills Gained

- Current scenario/job opportunities of embedded industries.

- Understanding the skill set required in a new employee in embedded industry.

- Understanding the robotics future and scope Understanding the different microcontroller available in the industry & their use.

Outcomes of attending the workshop:

- What "the Internet of Things" means and how it relates to Cloud computing concepts

- How open platforms allow you to store your sensor data in the Cloud

- The basic usage of the Arduino environment for creating your own embedded projects at low cost

- How to connect your Arduino with your Android phone.

- How to send data to the Internet and talk to the Cloud.

Conclusion: In this Workshop, how machine to machine connectivity is rapidly growing everywhere was discussed. Also the business benefits for connected devices and assets for remote location connectivity are instantly cleared.

PHOTOGRAPHS:-