

#### Department of Electronics and telecommunication Engineering

# SKEP LECTURE 5 REPORT

DATED- 04/10/2018

Time: 3:00 to 5:00 PM

Address: MGM's College of Engineering and Technology Kamothe, Navi Mumbai.

### **ABOUT SKEP: - Skill and Knowledge Enhancement Program**

Skill and Knowledge Enhancement Program (SKEP). SKEP organizes talks, tutorials and distinguished lectures with an intention to reach out to students, faculties and industry professionals. SKEP programmers are an exercise in life-long learning and are offered for the continuing education and skill up gradation of professionals. In addition, this program seeks to motivate and inspire the young student community and endow them with a rare insight into what the industry has to offer and its expectations, thus helping them ease their entry into corporate life. Main goals of SKEP include professional skills development, imparting technical expertise to develop viable applications, disseminating useful knowledge from current fields of interest to the beneficiaries and inculcating technical and logical thinking among the student community. SKEP programs are conducted by invited experts on the state-of-the-art topics from among the research, academic and industrial areas. The intended audience is students, faculty, IEEE members and other interested persons from research, industry and academic institutions.

As part of activity of SKEP, the department of EXTC Engineering organized a guest lecture inviting **Dr. Abhay Phansikar(Bombay Section Chair)** on 04<sup>th</sup>October 2018 at Dr.Sarvepalli Radhakrishnan Hall. Students of second year, Third Year, Final Year EXTC attended the lecture. In his address, **Dr. Abhay Phansikar**Discussed on the topic "**RFID & EMBEDDED SOLUTIONS**".

## **ABOUT the Department: - Electronics and telecommunication Engineering**

**Vision** - To produce world class Technocrats, Scientists & Entrepreneurs with new ideas & innovations to meet cost effective industry expectations for all sections of society.

#### Mission -

1.To develop & deliver quality academic programs in emerging & innovative field of Engineering to empower the students to meet Industry Standards.

- 2. To motivate students to develop innovative solutions for betterment of society.
- 3. To Create Centre of Excellence by establishing the Incubation Centers to meet global research challenges.

In his lecture Dr. Abhay Phansikar discussed the Following:-

- 1. What is RFID?
- 2. ADC Technology.
- 3. In all Embedded Technology –some power supply, communication process, intelligent processing, memory storage
- 4. RFID Applications
  - Manufacturing and processing
  - Supply Chain Management
  - Retail
  - Security
  - Location Tracking
  - Assembly Line, Smart Cabinet
  - Handheld Applications



Fig 1&2:-Dr. Abhay Phansikar addressing the Students

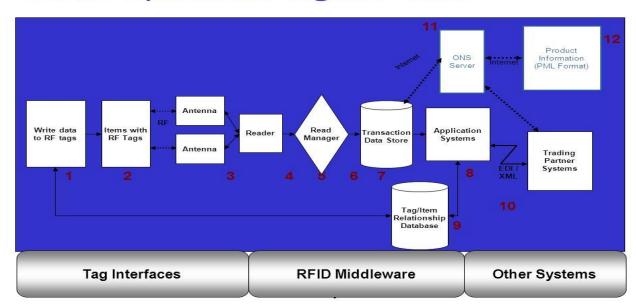
- 5. RFID Tags
  - Tags can be attached to almost anything
  - Passive Tags
  - Active Tags

6.RFID tags: smart labels, smart groceries, smart refrigerator



Fig3:- RFID tags -Smart labels

- 7. Using Image Processing & RFID Reader.
  - Amazon Go (prototype) can be made.
- 8. RFID systems: logical view



# RFID systems: logical view

Fig4:-RFID System - Logical view.

- 9. Problems & Solutions Using Various Technologies(using RFID, GPS, GPRS, Microcontroller).
  - Retail Store
  - Ware House
  - Container Yard



Fig 5:- Solution of Warehouse

At the end of the lecture, few students asked questions regarding the topic and were very satisfied with the answer from **Dr.Phansikar.** He concluded his talk by insisting the students and faculty to plan for more of vertical Research, Projects Based on RFID & EMBEDDED SOLUTIONS.

We thank The Management, The Principal, The HOD, Guest speaker, Participants and supporting faculty's for their support.

Attendance – 79 Students, 7 Faculty members.

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Fig 6:- RFID application points