NARAYANA ENGINEERING COLLEGE::NELLORE

Permanently affiliated to JNTUA Ananthapuramu, Approved by AICTE,
Accorded 'A' grade by Govt. of AP, Recognized by UGC 2(f) & 12(B),
ISO 9001:2015 certified Institution, Approved with 'A+' Grade by NAAC

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report on "DCS GUEST LECTURE"

The department of ECE has conducted Guest Lecture on *"**Digital Communication Systems (DCS)*** on 20/08/2019. Students of III B.Tech ECE students are participated in this guest lecture. Guest lecture conducted in association with Institution of Electronics and Telecommunication Engineers (IETE).

Resourse Person: Dr.Sk.Shafee, BSNL, Nellore.

The lecture was mainly focused on-

- Data Transmission using different transmission Techniques in both Land line & Mobile communication.
- Baseband digital transmission.
- Performance of baseband digital transmission
  –Model
  –Bit error rate
- Low frequency & High Frequency of digital data.
- Different Base-band Transmission as well as Band-pass Transmission shift-Keying Techniques.
- Noise Scenario while transmitting data in free space
- Analog communications
  –AM, FM
- Digital Communications
  –Transfer of information in digits
  –Dominant technology today
  –Broadband, 3G, DAB/DVB

Dr.Sk.Shafee, initially explained about Introduction of *Digital Communication Systems (DCS)* and also concentrated on real time applications of DCS. Also he explained in detail about all above mentioned contents.

Resource Person focused on digital Modulation, It provides more information capacity, high data security, quicker system availability with great quality communication. Hence, digital modulation techniques have a greater demand, for their capacity to convey larger amounts of data than analog modulation techniques.

Dr.Sk.Shafee, explaining Digital Communication Systems concepts

Dr. Shafee clarifying the students doubts.

Students asked some questions to **Resourse Person**. Dr. Shafee clarified all the questions asked by students. Some of the questions are,

- How do communication systems work?
- How do communication systems perform in the presence of noise?
- Where does noise come from?
  –External sources: e.g., atmospheric, galactic noise, interference.
  –Internal sources: generated by communication devices themselves.

Students are able to understand how digital communication device works in real time. The guest lecture came to an end by vote of thanks and the feedback session.