

## NALLA NARASIMHA REDDY EDUCATION SOCIETY'S GROUP OF INSTITUTIONS Appropried by AICTE. New Belloit. Affiliated to JINTU. Hyderabad.

SCHOOL OF ENGINEERING

Guest Lecture on Hydrological Parameters concerning Project development for Irrigation by Sri Bhavani Ramshnaker on 15.7.2016 (Retd).

Sri Bhavani Ramshanker Superentending Engineer (SE) retired from Irrigation Dept gave Guest Lecture on 15.07.2016 for final Year Civil Students. The topic was **Hydrological Parameters concerning Project development for Irrigation**. (52) Students and faculty attended the lecture. Dean and HoD participated. The speaker explained that hydrological studies include

- A) Study of Rainfall, Evapotranspiration and water requirement of crops contemplated under a proposed irrigation project.
- B) Hydrological cycle is Evapotranspiration from water bodies, Seas condensation and precipitation. The cycle repeats
- C) Rainfall is distributed into 3 parts a)Runoff b)Infiltration & Percolation c)Evaporation and Transpiration

Irrigation projects estimate runoff from a given catchment. at a proposed site. using Khosla's formula. Irrigation project comprises of one

- 1.Storage Reservoir
- 2.Dam (Barrage)
- 3. Canals or Pumping for lift irrigation.

Rainfall data of 10 years is analysed and 75% dependable rainfall data is considerable for storage of Reservoir.

Siltation is a problem for all the irrigation projects. Silt deposition is estimated before project is constructed. Due to siltation ayacut will be reduced proportionately.

The students asked for preventive/remedial measures for siltation. The speaker replied that catchment area has to be treated with afforestation.

Few students wanted to know that inflows to the project were erratic and how this could be solved. The speaker replied that rainfall is erratic in few years and more than normal in few years. The Reservoirs may have to be constructed to store 2 years flows.

Feedback from students showed that about 70% felt satisfactory and 30% students expressed that more time could have been allotted for the subject.





## DEPARTMENT OF CIVIL ENGINEERING

Guest Lecture on "Hydrological Studies" (15-07-2016)



Mr Bhavani Rama Shankar, Rtd Superindent



Students, Mr Bhavani Rama Shankar and HoD in Guest Lecture participation





Interaction programme during the Guest Lecture