EXPERT LECTURE ON APPLICATION OF REMOTE SENSING AND GIS IN WATER RESOURCES ENGINEERING

Date: 27/09/2021 Semester: 3rd, 5th and 7th, Civil Engineering Department



Objective-

The main objective of this expert lecture was to explain the application of remote sensing and GIS and explain recording reflected or emitted energy and processing, analyzing, and applying the new technology in today's world. In much of remote sensing, the process involves an interaction between incident radiation and the targets of interest. To provide the knowledge of content beyond the syllabus this lecture helped to the students in three subjects i.e. (a) Remote Sensing and GIS (b) Irrigation Engineering (c) Application of GIS in Civil Engineering.

Summary:

In the first session, the expert delivered the lecture on remote sensing and GIS. In current time the monitoring of flood, drought events, and irrigation management are possible with the help of high resolution satellite data. This lecture also provided a brief overview of the potential applications of remote sensing in water resources. Remote sensing techniques have been widely used to delineate the surface water bodies, estimate meteorological variables like temperature and precipitation, estimate hydrological state variables like soil moisture and land surface characteristics, and to estimate fluxes such as Evapotranspiration.

Feedback from Participants	Out of 10 (Average)
(a) Knowledge	9.1
(b) Practical Experience	9.2
(c) Duration	9.4
(d) Expert Knowledge and Experience	9.5



Course Participant:

The expert lecture was organized for the students of 3rd, 5th and 7th Semester, Civil Engineering Department. Total of 103 participants participated and each one was explained the use of remote sensing in hydrology include the estimation of hydro meteorological states such as land surface temperature, near-surface soil moisture, snow cover, water quality.

EXPERT:

MR.UTKARSH NIGAM Assistant Professor Civil Engineering Department L. D. C. E Ahmedabad, Gujarat

Civil Engineering Department Expert Lecture Report