

G H Patel College of Engineering & Technology, V. V. Nagar



Department of Civil Engineering

Report on

Expert talk on "Various NDT Methods of Concrete Super Structures"

The Civil Engineering department at G H Patel College of Engineering & Technology (A Constituent College of CVM University) had organized an expert talk on *Various NDT Methods* of Concrete Super Structures on 10th September, 2020. Total of 82 participants (Students and Faculties) of Civil Engineering Department have participated.

AIM:

The main aim of the talk was to make students aware various non-destructive tests (NDT) that can be performed on various concrete structures.

About the Expert:

Mr. Dixit Nakum did his B.E. Civil Engineering from The M. S. University of Baroda, Vadodara and currently working as Technical Manager in GEO Dynamics since 2008.

About the Talk:

Mr. Nakum started his talk with the introduction of Non Destructive Testing (NDT) of concrete. Nondestructive testing is a wide group of analysis techniques used in science and technology industry to evaluate the properties of a material, component or system without causing damage. He discussed about various quality assessed by NDT for existing and new structures such as concrete foundations and super structures of Jetties and other marine structures, bridges etc. After that he began discussing about applications and principles of various NDT tests performed on concrete structures. He discussed about Rebound Hammer Testing, Ultrasonic Pulse Velocity (UPV) test, Half Cell Potential Test, Rebar Locator and Carbonation tests. Besides numerous advantages of non destructive testing he also discussed about various limitations of non destructive testing. After giving detailed idea about various NDT tests, he discussed about semi destructive tests such as Concrete Core Testing etc. Lastly, he showed and discussed various case studies of his organization on NDT testing for various concrete structures.

The session was brainstorming for all the students and students have learned many things about non destructive testing in the talk.