



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



## **Department of Civil Engineering**

### **Report on**

### **Expert talk on “Earthquake Engineering”**

Department of Civil Engineering, GCET had organized an expert lecture on “Earthquake Engineering” on 28<sup>th</sup> July 2017 for final year students especially for the students who selected earthquake engineering as an elective subject. 34 students and all faculty members had attended the expert talk.

#### **About the talk:**

The talk was delivered by Dr. Snehal Mevada, working at structural engineering department, Birla Vishwakarma Mahavidyalaya, Vallbh Vidyanagar. It was related to the basic of earthquake engineering, dynamic effect of earthquake on the structures and to minimize the effect of inertia forces on the structures by providing special arrangement like base isolation or dampers in the structures.

Expert discussed fault, seismograph and plotting of seismograph, P-waves, S-waves, location of epicenter, design philosophy of earthquake in the basic of earthquake engineering. Concept of Natural circular frequency, resonance of the frequency, lateral force distribution by seismic coefficient method and by response spectrum method was discussed. Sir also discussed the importance of the response spectra method.

Important of installation of the Base isolation and dampers in the building to minimize the vibration effect was discussed by giving the case study of Bhuj Civil Hospital Building

#### **Aim of Expert Talk:**

The main aim of the expert talk was enhanced the knowledge of the students for the safe design and analysis of Earthquake resistance structures.