ABSTRACT

Background: Extinct earthquakes events demonstrate that, buildings with irregularity are prone to earthquake damages. Thus as it's essential to identify the unstable response of the structure even in high seismic zones to chop back the seismic damages in buildings.

Objective: the foremost vital objective of this study is to know the behaviour of the structure in high seismic zone and conjointly to gauge construction overturning moment, construction Drift, Displacement, Design lateral forces. Throughout this purpose a fifteen storey-high building on four all completely different shapes like Rectangular, L-shape, H-shape, and C-shape area unit used as a comparison. The whole models were analysed with the help of ETABS 9.7.1 version. Within the gift study, Comparative Dynamic Analysis for all four cases is investigated to gauge the deformation of the structure.

Results & Conclusion: The results indicate that, building with severe irregularity produces additional deformation than those with less irregularity notably in high seismic zones. And put together the construction overturning moment varies reciprocally with height of the construction. The construction base shear for normal building is highest compare to irregular form buildings.

Keywords— completely different shapes, Dynamic analysis, Multi-storey, Building and ETABS.