ABSTRACT

In the recent time, it has been observed that there is a considerable increase in the construction of multistoried buildings in many urban areas. The extension of such structures vertically has made them sensitive against lateral loadings which could be mainly in the form of seismic loads. It is the duty of the urban and town engineer to look for the safety and protection of human lives living in multi-storey structures against the effects of seismic activities. A complete overview for the work done for such seismic activities and analysis on a multi-storey building has been provided. The report also considers the provision for seismic zone variation, shear walls and vibrations from earthquake and what are the principles that constructors and urban planners should undertake before designing the structure. The report is a comparative study of two international codes that are currently being used in the building code of Pakistan for providing rules and regulation against seismic safety of tall buildings. The report also provides an extensive comparison of the parameters upon which the better code could be selected in order to provide sustainability for buildings in the specified seismic zones. In this project the importance of seismic parameters for a building which includes storey drifts, base shear, axial forces, moments, storey shear and displacement has also been discussed. An extensive use of ETABS (Extended three dimensional analysis of building system) software has been incorporated in seismic analysis modelling and parameter calculations.