"SIESMIC ANALYSIS AND RESPONSE REDUCTION OF RC MULTISTORIED BUILDING USING FRICTION DAMPERS"

PROJECT REPORT

Submitted By

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In partial fulfillment of the requirements for the degree of

BACHELOR OF ENGINEERING

In

CIVIL ENGINEERING

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI-590018

Under the Guidance of

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Certificate

Certified that the project work entitled **"Siesmic analysis and response reduction of RC multistoried building using friction dampers"** has been successfully completed by

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The bonafide students of Department of Civil Engineering, Alvas Institute of Engineering Technology in partial fulfilment for the award of BACHELOR OF ENGINEERING in **CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI** during the year 2021. It is certified that all corrections /suggestions identicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfied academic requirements in respect of seminar work described for the Bachelor of Engineering Degree.

09/8/21

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ABSTRACT

Damping Plays important role in design of Earthquake Resistant Structures, which reduces the response of the structure when they are subjected to lateral loads. There are many different types of dampers in use. In the present study Friction Dampers are used to evaluate the response of RC buildings. The main task of a structure is to bear the lateral loads and transfer them to the foundation. Since the lateral loads imposed on a structure are dynamic in nature, they cause vibrations in the structure. In order to have earthquake resistant structures, friction dampers have been used. Buildings with G+5, G+10 and G+20 are analyzed, with and without MFD. In the present study the software ETABS 2019 have been used. The Time history analyses the response of the RC building considered in the present study is evaluated and compared with and without MFD. It has been observed that the building MFD perform well when compare with the building without MFD.