

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“JNANA SANGAMA”, BELAGAVI-590018



PROJECT REPORT

on

**“ANALYSIS AND DESIGN OF A MULTISTOREY BUILDING
USING ETABS”**

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted by:

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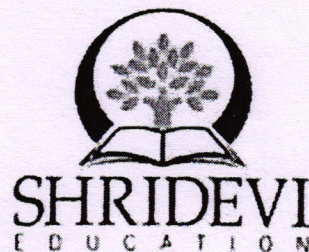
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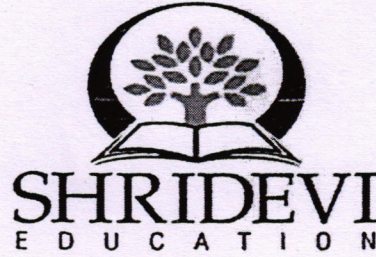
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2022-23

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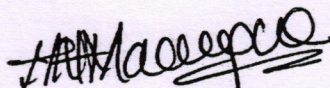
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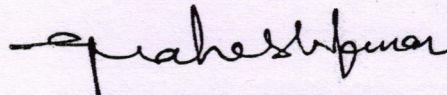
CERTIFICATE

This is to be certified that the technical seminar work entitled "ANALYSIS AND DESIGN OF A MULTISTOREY BUILDING USING ETABS" out Carried out by Ms. ALIYA TABASSUM (1SV19CV001) Mr. APPUYADAV E(1SV19CV005), Mr. AVINASH NAIK S (1SV19CV007), Ms. SUSHMITHA R (1SV19CV029) bonafide students of SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TUMKUR in partial fulfillment for the award of degree Bachelor of Engineering in CIVIL ENGINEERING of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi during the year 2022-2023. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of the curriculum prescribed for the Bachelor degree.


Signature of the Guide

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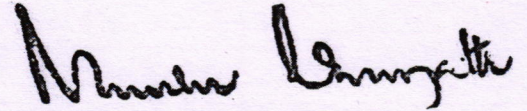
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- 1) Dr. G. Mahesh Kumar
- 2) M H KATOR


- 1) Dr. G. Mahesh Kumar 25/11/23
- 2) M H KATOR 25/11/23

ABSTRACT

The rapid growth of the urban population and consequent pressure on the limited space has restricted the availability of the land. The high cost of land, the desire to avoid a continuous urban sprawl and the need to preserve important agricultural land have all contributed to drive residential buildings upward. Such residential building which runs vertically is generally known as apartments.

The present project deals with the analysis and design of G+4 floor residential apartment. In order to analyse and design, it is important to obtain architectural plan of the building. Analysis is done by using ETABS and designed manually by considering possible loading conditions such as dead load, live load and wind load.

Slab are designed as per Indian Standards and the beams are designed based on the BMD and SFD obtained from the software using IS 456:2000. Similarly design of columns, footing is done and the steel detailing is done using AutoCAD software.


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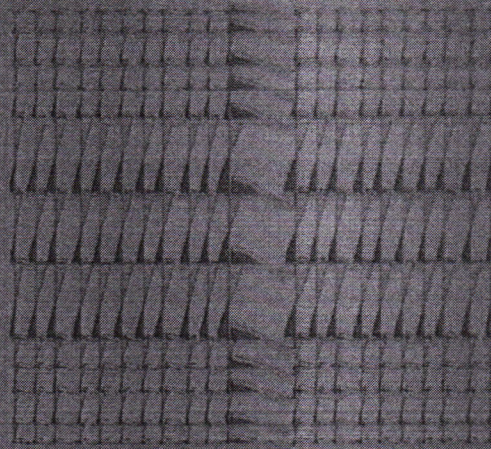


Fig.12: Shear Force diagram after Structural analysis

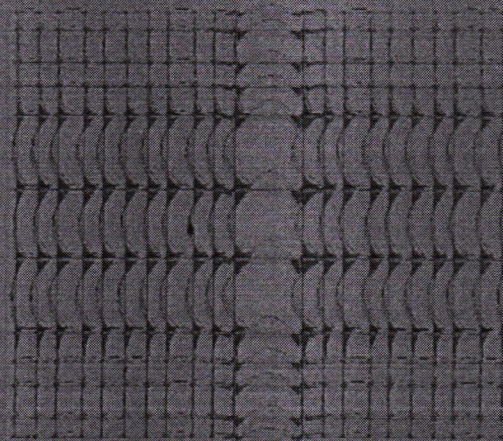


Fig.13: Bending Moment diagram after Structural analysis

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