

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", MACHHE, BELAGAVI – 590018, KARNATAKA



2022-2023

Project Report on

“ANALYSIS AND DESIGN OF SEMI-COMMERCIAL BUILDING”

Submitted in partial fulfillment of the requirement for the award of degree

**BACHELOR OF ENGINEERING
IN
CIVIL ENGINEERING**

Submitted by:

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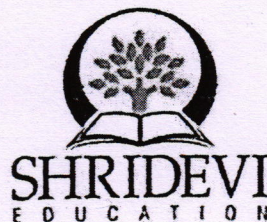
Under the guidance of:

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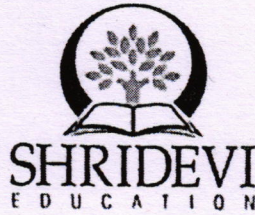
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CERTIFICATE

Certified that a project report on entitled "ANALYSIS AND DESIGN OF SEMI-COMMERCIAL BUILDING" has been successfully carried out by PAVAN KUMAR G (1SV19CVO19), RAKESH GOWDA T J (1SV19CV021), KUSHAL R (1SV19CV032) students of Shridevi Institute of Engineering and Technology, Tumakuru -572106, in partial fulfillment of project for the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Jnana Sangama, Belagavi -590018 during the academic year 2022-2023. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the Department library. The report has been approved as it satisfies the academic requirement in respect of project on current topic prescribed for B.E Degree.

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26/05/2023

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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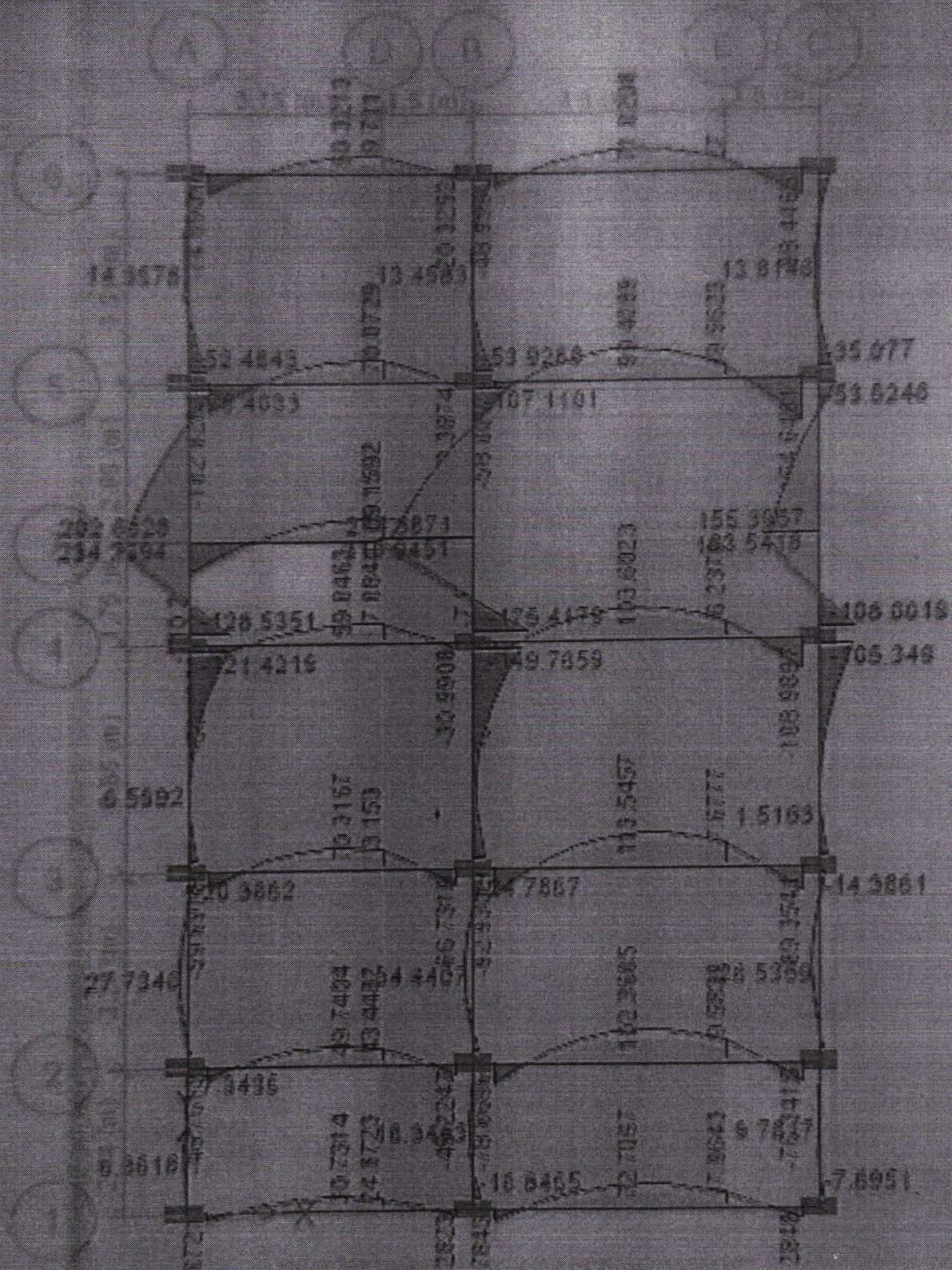


Fig no 5.7.7 : First Floor BMD

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