VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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



2021-2022 Project Report

on

"DESIGN AND ANALYSIS OF SCHOOL BUILDING"

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

BACHELOR OF ENGINEERING IN CIVIL ENGINEERING

Submitted by:

GURU H M 1SV19CV409
MEGHANA B U 1SV19CV411
RAVIKUMAR G R 1SV19CV414

Under the guidance of:
Dr. G MAHESH KUMAR
Professor and Head
Dept. Of Civil Engineering
SIET, TUMAKURU



PRINCIPAL SIET., TUMAKURU

DEPARTMENT OF CIVIL ENGINEERING
SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belagavi)
Sira Road, Tumakuru – 572106 KARNATAKA

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An ISO 9001:2000 Certified Institution) Sira Road, Tumakuru – 572106.



DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE

Certified that a project report on entitled "DESIGN AND ANALYSIS OF SCHOOL-BUILDING" has been successfully carried out by GURU H M (ISV19CV409), MEGHANA B U (ISV19CV411), RAVIKUMAR G R (ISV19CV414), 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 2021-2022. 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.

-grahelhour

Signature of the Project Guide Dr. G Mahesh Kumar Professor and Head Dept. of Civil Engineering SIET, Tumakuru eprahestopua

Signature of the H O D
Dr. G Mahesh Kumar
Professor and Head
Dept. of Civil Engineering
SIET, Tumakuru

Signature of the Principal Dr. Narendra Viswanath

Principal SIET, Tumakuru.

External Viva

Name of the Examiners

2...KADHIKA J.D.

stepmed mensol

PRINCIPAL SIET., TUMAKURU Signature with date

(2-shares in last

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 buildings which runs vertically is generally known as apartments.

The present project deals with the analysis and design of School Building. In order to analyze and design, it is important to obtain plan of the particular building. Analysis is done by using ETABS and designed manually by considering possible loading conditions such as dead load, live load and wind load.

Slabs are designed based on the footing conditions as per IS 875:1987 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 Auto-CAD software.

PRINCIPAL SIET., TUMAKURU