

**Trinity College of Engineering and Research, Pune**  
**Department of Civil Engineering**  
**BE Project List A.Y. 2022-23**

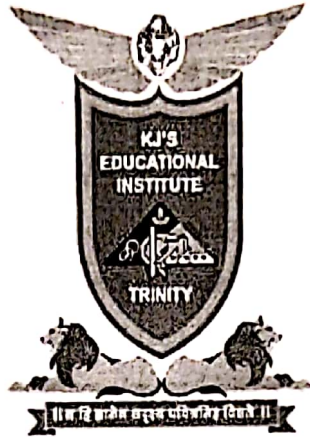
Group No	Roll No	Name of Student	Guide Name	Title of Project
1	CE4015	JAWALE ROHAN LAHU	N A AUTADE	Control dust on roadway using Calcium Chloride
	CE4029	PAWAR YASHRAJ SUDHIR		
	CE4033	SAWANT VAIBHAV MOHAN		
	CE4036	SHINDE DHIRAJ LAXMAN		
	CE4042	WAGHMARE VISHAL UTTAM		
2	CE4001	AHER SIDHARTH SANJAY	R N JAGTAP	Analysis and Design of RCC twisted building using Etab software
	CE4003	BAGUL NIKHIL JITENDRA		
	CE4004	BHUSARE VIDHI V		
	CE4006	CHAVHAN NIKHIL AKARAM		
3	CE4002	BABAR SANKET SUNIL	S V SHELAR	Experimental study on Earthquake resisting structure with modern technique(Pendulum)
	CE4014	JADHAV SHUBHAM UTTAM		
	CE4024	MULIK ATHARVA GANESH		
	CE4025	NATU ANIKET SAMBHAJI		
4	CE4016	KALE SUDHANSHU AJAY	S M KAZI	Experimental study of concrete by using Titanium dioxide in concrete to filter out smoke pollution from air
	CE4031	RATHOD ABHIJIT RAJU		
	CE4041	VASANWALA ABDEALI BURHAN		
	CE4043	YADAV AAKASH RAMESH		
	CE4044	YELPURE HARSHAD SANTOSH		
5	CE4008	GADEWAR SATYAM SAINATH	S M KAZI	The implementation of supply chain management as a solution to problems of low labour productivity that are affecting the Indian construction sector in its epidemic state
	CE4009	GAIKWAD MRUNAL SHRIMANT		
	CE4011	GAVALI VINAYAK SHANKAR		
	CE4012	GHADVE NIKHIL DILIP		
	CE4026	NIGADE PRAGATI GORAKH		
6	CE4013	HANDORE HRUSHIKESH SANJA	S M KAZI	Optimal design of water distribution network using WATERGEM software in Chambli village
	CE4018	KARVE BHUSHAN SANTOSH		
	CE4021	KHATPE AVINASH PRABHAKAR		
	CE4023	MARGALE DEEPAK PANDURAN		
	CE4038	SWAMI MAHALING MALLINATI		
7	CE4005	BOOB DHEERAJ MAHESH	V V SHELAR	Evaluatio of compressive testing results using Bamboo plastic composite as aggregate in concrete block
	CE4022	KOLHAPURE PARSHWA SACHIN		
	CE4027	PANCHARIYA SUMEET MANOJ		
	CE4040	TUPE PRATIK ANAND		
8	CE4017	KAMBLE RUSHIKESH RAJU	N A AUTADE	Design & analytical utilizing python and praphical user intrface of G+2 structure
	CE4019	KENJALE ANKITA SANJAY		
	CE4028	PAWAR RAVIKANT ASHOK		
	CE4032	SARDAR SWAPNIL BHAURAO		
	CE4039	RAHUL SHIVSHANKAR TAMANAVARU		
9	CE4034	SHAIKH ALTAMASH GULAB	V V SHELAR	Utilization of marble dust in fired clay bricks
	CE4035	SHAIKH JIJAJAIN MD SHARIF		

  
**Project Coordinator**

  
**Head of Department**

# TRINITY COLLEGE OF ENGINEERING AND RESEARCH


Department of Civil Engineering



## CERTIFICATE

This is to certify that, MR . RAVIKANT ASHOK PAWAR (72169996M), MS. ANKITA SANJAY KENJALE (71933336K), MR. RAHUL TAMANAVARU(71425445C), MR . SWAPNIL BHAURAO SARDAR (71624497H)MR . RUSHIKESH RAJU KAMBLE (72169999F) has satisfactorily completed the Seminar work entitled; "Design and Analytical Utilizing Python and a Graphical user interface of G+2 Structure" this work is being submitted in the partial fulfillment of prescribed syllabus of BE (Civil Engineering), Savitribai Phule Pune University, Pune for the academic year 2022-2023.

  
Prof . Mrs. Nilima Autade  
PROJECT Guide

  
Prof. V.S. Shingade  
Head, Civil Engg. Dept.

  
DR. A. B. AUTI  
PRINCIPAL

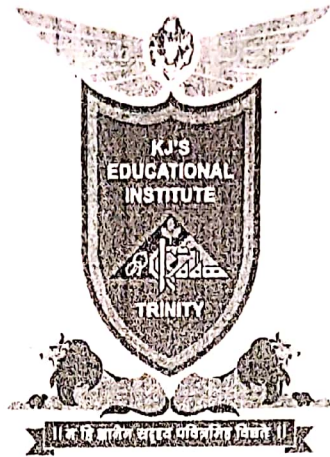
  
EXTERNAL EXAMINER

## ABTRACT

Analysis and design of buildings for static forces is a routine affair these days because of availability of affordable computers and specialized programs which can be used for the analysis. On the other hand, dynamic analysis is a time consuming process and requires additional input related to mass of the structure, and an understanding of structural dynamics for interpretation of analytical results. Reinforced Concrete (RC) frame buildings are most common type of constructions in urban India, which are subjected to several types of forces during their lifetime, such as static forces due to dead and live loads and dynamic forces due to earthquake. Here the present study describes the effect of earthquake load which is one of the most important dynamic loads along with its consideration during the analysis of the structure. In the present study a multi-storied framed structure of (G+2) pattern is selected. Linear seismic analysis is done for the building by static method (Seismic Coefficient Method) and dynamic method (Response Spectrum Method) using Python software as per the IS-1893-2016-Part-1. A comparison is done between the static and dynamic analysis, the results such as Bending moment, Nodal Displacements, Mode shapes are observed, compared and summarized for Beams, Columns and Structure as a whole during both the analysis.

# TRINITY COLLEGE OF ENGINEERING AND RESEARCH

Department of Civil Engineering



## CERTIFICATE

This is to certify that, the following students have satisfactorily completed the Project work entitled: **"DESIGN OF WATER DISTRIBUTION SYSTEM USING WATER GEMS SOFTWARE IN CHAMBLI VILLAGE"** this work is being submitted in the partial fulfillment of prescribed syllabus of Final Year of BE (Civil-Engineering), Savitribai Phule Pune University, Pune for the academic year 2022-2023.

Name of the Students

MR. BHUSHAN SANTOSH KARVE  
MR. HIRI SHIKESH SANJAY HANDORE  
MR. DEEPAK PANDURANG MARGALE  
MR. AVINASH PRABHAKAR KHATPE  
MR. SWAMI MAHALING MALLINATH

Examination Seat No.

(B190650015)  
(B190650011)  
(B190650019)  
(B190650017)  
(B190650034)

PROF. S.M. KAZI

PROJECT GUIDE

DR. A. BAUTII  
PRINCIPAL

PROF. V.S. SHINGADE

HOD, CIVIL DEPT.

EXTERNAL EXAMINER

## ABSTRACT

In Present Study of Chambli village was done and Water distribution system Network was designed, which is located in pune district, state Maharashtra, India. For the design of Chambli water distribution network study of present population, population forecast, for three decades, water demand, and flow and also survey of village Chambli was done with the help of auto level. From the level survey, map was created and also the elevation and length of pipe line required for the village was calculated. The node no. and pipe number was denoted on map. Water distribution Network for the village was designed using Watergems software and compared with previous results.