

**Shreeyash College of Engineering and Technology, Aurangabad**  
**(Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)**



## **CERTIFICATE**

This is to certify that the dissertation entitled “**Flexural Performance of Lightweight Ferrocement Panels by Using Expanded Metal Mesh With and Without Glass Fiber: An Experimental Study**”, which is being submitted herewith for the award of the ‘**Master of Engineering**’ in ‘**Civil Engineering**’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by ‘**Rajendra Subhash Khamkar**’ under my supervision and guidance. The work embodied in this dissertation has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.

**Dr. Uttam Kalwane**

Guide

Department of Civil Engineering  
SYCET  
Aurangabad

**Prof. J. P. Bhandari**

Head

Department of Civil Engineering  
SYCET  
Aurangabad

24.6.17

**Dr. R. S. Pawar**

Principal

Shreeyash College of Engineering and Technology

**Shreeyash College of Engineering and Technology, Aurangabad**  
**(DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,**  
**AURANGABAD)**



**CERTIFICATE**

This is to certify that the thesis entitled **“STUDY OF EFFECT OF SEISMIC EXCITATION ANGLE FOR THE ANALYSIS OF RC FRAME”**, which is being submitted herewith for the award of the **‘Masters of Engineering’** in **‘Structural Engineering’** of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by **Rupali S. Jadhav** under my supervision and guidance. The work embodied in this project report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.



**Dr. Uttam Kalwane**

Guide  
Civil Engineering Department  
S.Y.C.E.T, Aurangabad



**Prof. J.P. Bhandari**

Head  
Civil Engineering Department  
S.Y.C.E.T, Aurangabad



**Dr. R. S. Pawar**

Principal  
Shreeyash College of Engineering and Technology  
Aurangabad

## CERTIFICATE

This is to certify that the project report entitled “**Comparative Study of Multi Storey Building Using Inelastic Static Analysis**”, which is being submitted to Shreeyash College of Engineering and Technology, affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra State, India in the faculty of Engineering and Technology in partial fulfillment of the requirements for the award of ‘**Masters**’ in ‘**Civil-Structures**’. This is the result of the original work and contribution by ‘**Mr. Dake Govind Hanuman**’ under my supervision and guidance. The work embodied in this report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma /examining body or university to the best of knowledge and belief.

Place: Aurangabad

Date: 10/07/2017



**Prof. U. S. Salunkhe**

Co-Guide

Department of Civil Engineering



**Dr. U. B. Kalwane**

Guide

Department of Civil Engineering



**Prof. J. P. Bhandari**

Head

Department of Civil Engineering



**DR R. S. Pawar**

Principal

Shreeyash College of Engineering and Technology  
Aurangabad



## CERTIFICATE

This is to certify that the project report entitled “**Displacement and Stresses in deep Beams Using Trigonometric Shear Deformation Theory**”, which is being submitted to Shreeyash College of Engineering and Technology, affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra State, India in the faculty of Science and Technology in partial fulfillment of the requirements for the award of ‘**Masters**’ in ‘**Structural Engineering**’. This is the result of the original work and contribution by ‘**Mr. Pravin Kapdis**’ under my supervision and guidance. The work embodied in this report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma / examining body or university to the best of knowledge and belief.

Place: Aurangabad


Date:



**Dr. U. B. Kalwane**

Guide

Department of Civil Engineering



**Prof. U. S. Salunkhe**

Co-Guide

Department of Civil Engineering



**Prof. J. P. Bhandari**

Head

Department of Civil Engineering



**Dr. R. S. Pawar**

Principal

Shreeyash College of Engineering and Technology  
Aurangabad

# CERTIFICATE

This is to certify that the dissertation report entitled “**Bending Analysis of Thick Isotropic by Using 5<sup>th</sup> Order Shear Deformation Theory**”, which is being submitted to Shreeyash College of Engineering and Technology, affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra State, India in the faculty of Science and Technology in partial fulfillment of the requirements for the award of ‘**Masters**’ in ‘**Structural Engineering**’. This is the result of the original work and contribution by ‘**Ms. Supriya Patil**’ under our supervision and guidance. The work embodied in this report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma / examining body or university to the best of knowledge and belief.

Place: Aurangabad

Date:



**Dr. U. B. Kalwane**

Guide

Department of Civil Engineering



**Prof. J. P. Bhandari**

Co-Guide and Head

Department of Civil Engineering



**Dr. R. S. Pawar**

Principal

Shreeyash College of Engineering and Technology  
Aurangabad

## CERTIFICATE

This is to certify that the dissertation entitled “**Effective Utilization of Foundry Sand And Ground Granulated Blast Furnace Slag In Geopolymer Concrete**” which is being submitted herewith for the award of the ‘**Master of Engineering in Civil Structures**’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by **Mr. Morale Angad Vinayak (Seat No. 61810003)** under my supervision and guidance. The work embodied in this dissertation has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.



**Dr. Uttam Kalwane**  
**Guide**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.



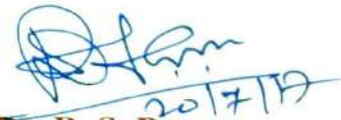
**Prof. A.P. Jaiswal**  
**Co-Guide**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.



**Prof. J.P. Bhandari**  
**Head of Department**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.

  
2017/19

**Dr. R. S. Pawar**  
**Principal**

Shreeyash College of Engineering and  
Technology, Aurangabad.



## CERTIFICATE

This is to certify that the dissertation entitled “Comparative Study on the Seismic Analysis and Wind Analysis of Multistorey Building with Shear Wall and Diagrid” which is being submitted herewith for the award of the ‘Master of Engineering in Civil Structures’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by **Mr. Sumitchandra Purushottam Sharma (Seat No. 9D0000061)** under my supervision and guidance. The work embodied in this dissertation has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.



**Dr. Uttam Kalwane**  
**Guide**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.



**Prof. N. S. Vaidkar**  
**P.G. Coordinator**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.



**Prof. J.P. Bhandari**  
**Head and Co-Guide**

Department of Civil Engineering,  
Shreeyash College of Engineering and  
Technology, Aurangabad.



**Dr. R. S. Pawar**  
**Principal**

Shreeyash College of Engineering and  
Technology, Aurangabad.

**Shreeyash College of Engineering and Technology, Aurangabad  
(DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,  
AURANGABAD)**



**CERTIFICATE**

This is to certify that the thesis entitled **“SEISMIC ANALYSIS OF CONCRETE GRAVITY DAM WITH GALLERY AND WITHOUT GALLERY”**, which is being submitted herewith for the award of the **‘Masters of Engineering’** in **‘Structural Engineering’** of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by **Urmila S. Sarde** under my supervision and guidance. The work embodied in this project report has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.



**Dr. Uttam Kalwane**

Guide  
Civil Engineering Department  
S.Y.C.E.T, Aurangabad



**Prof. J. P. Bhandari**

Head  
Civil Engineering Department  
S.Y.C.E.T, Aurangabad



**Dr. R. S. Pawar**

Principal  
Shreeyash College of Engineering and Technology  
Aurangabad



**Shreeyash College of Engineering and Technology, Aurangabad**  
**(Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)**



## **CERTIFICATE**

This is to certify that the dissertation entitled “ **Time History Analysis Of Structure Having Overhead Water Tank Acting as a Tuned Liquid Damper** ”, which is being submitted herewith for the award of the ‘**Master of Engineering**’ in ‘**Civil Engineering**’ of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. This is the contribution by ‘**Yogesh Shivajirao Shejul**’ under my supervision and guidance. The work embodied in this dissertation has not formed earlier for the basis of the award of any degree or compatible certificate or similar title of this for any other diploma/examining body or university to the best of knowledge and belief.

**Dr. Uttam Kalwane**

Guide  
Civil Engineering Department  
SYCET  
Aurangabad

**Prof. J.P. Bhandari**

Head  
Civil Engineering Department  
SYCET  
Aurangabad

**Dr. R.S. Pawar**

Principal  
Shreeyash College of Engineering and Technology  
Aurangabad