

A
PROJECT REPORT

ON

“Formation of bioenergy by food waste”.
Submitted in partial fulfillment of the requirements of curriculum of

BE CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

Mr. BIKRAM AMIT GAYEN [16]

Mr. NILESH DILIP GANGURDE [14]

Mr. AAKASH SANJAY RALE [15]

GUIDED BY

Prof. SONIYA KADAM.



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,

MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAI, DIST-THANE 2023-2024

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAL, DIST-THANE 2023-2024

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project Report titled "Formation of bioenergy by food waste" is bonafide work of;

Mr. BIKRAM AMIT GAYEN

Mr. NILESH DILIP GANGURDE

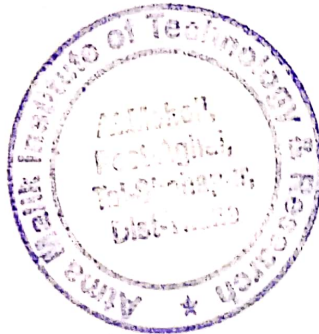
Mr. AAKASH SANJAY RALE

Has successfully completed in a satisfactory manner in a partial fulfilment of requirements for award of Degree in Civil Engineering conferred by the Maharashtra State Board of Technical Education.

Prof. SONIYA KADAM
(Project Guide)

Dr. M. S. PURKAR

(HOD, Civil Engineering Degree)



Dr. D.D. SHINDE

(Principal, AMRIT)

A
PROJECT REPORT
ON
“Ground Improvement Using Stone Column”

Submitted in partial fulfillment of the
Requirement for the award of the

Bachelors Degree In Civil Engineering

SUBMITTED BY

Arvind I. Chaudhary
Chandan B. Thapad
Manthan M. Jadhav
Shubham R. Bhoje

GUIDED BY

Prof. Nivrutti Jadhav

Conferred by

University of Mumbai



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
AT: MOHILI, POST: AGHAI, SHAHAPUR, DIST: THANE
(2023-2024)

VISHWATMAK JANGLI MAHARAJ ASHRAM TRUST
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

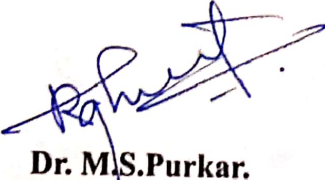
This is to certify that the Major project titled “Ground Improvement using Stone Column” duly submitted by the following students are

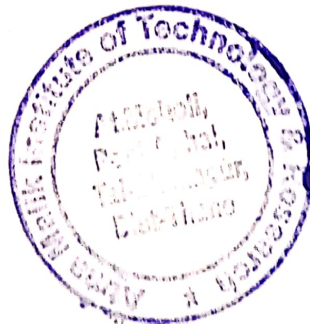
Arvind I. Chaudhary
Chandan B. Thapad
Manthan M. Jadhav
Shubham R. Bhoje


has been completed under my supervision in a satisfactory manner in a partial fulfillment of the requirements for the award of **Bachelors Degree in Civil Engineering** to be conferred by the **University of Mumbai**. In my opinion, the work embodied in this report is comprehensive and fit for evaluation.


23/04/2024
Prof. Nivrutti Jadhav.

(Project Guide)


Dr. M.S.Purkar.
(HOD Civil)




Dr. D.D.Shinde.
(Principal)

FINAL REPORT
ON
“DESIGN & ESTIMATION OF COOLING TOWER
Submitted in partial fulfillment of the requirements of curriculum
of

BE CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

MRS. GAURI S. AKOLKAR (01)

MISS. TANVI S. ACHREKAR (02)

MISS. SMITA S. BHAGAT (04)

MR. GANESH B. CHAUDHARY (10)

GUIDED BY

Prof. SHAILESH J. PAGAR



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2023-24)
AT MOHILI, POST AGHAI, DIST-THANE 2023-2024

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAL, DIST-THANE 2023-2024

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project Report titled “DESIGN & ESTIMATION OF COOLING TOWER” is bonafide work of;

MRS. GAURI S. AKOLKAR (01)


MISS. TANVI S. ACHREKAR (02)

MISS. SMITA S. BHAGAT (04)

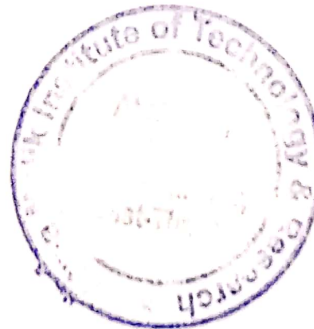
MR. GANESH B. CHAUDHARY (10)

Has successfully completed in a satisfactory manner in a partial fulfilment of requirements for award of Degree in Civil Engineering conferred by the Maharashtra State Board of Technical Education.


Prof. SHAILESH J. PAGAR
(Project Guide)


Dr. M. S. PURKAR

(HOD, Civil Engineering Degree)




Dr. D.D. SHINDE

(Principal, AMRIT)

Project report of
MAJOR PROJECT
On the Topic

Soil Stabilization Of Black Cotton Soil By Using Granite Powder.

Submitted in Partial Fulfillment of the
the requirement for the award of the

**Bachelor's Degree in Civil Engineering,
Academic Year 2023-24**

Submitted by

Urmila Ravindra Kamble

Vinayak Vaijnath Kharatmol

Srushti Shailesh Nimse

Tejas Ravindra Kirpan

Guide: Prof. Nivrutti Jadhav

HOD: Dr.M.S. Purkar

Conferred by



University of Mumbai

Department of Civil Engineering

**Atma Malik Institute of Technology and Research,
Mohili-Aghai, Shahapur**



!! Sab Ka Malik Atma !!

Vishwatmak Jangli Maharaj Ashram Trust's

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH



**CERTIFICATE
(MAJOR PROJECT)**

This is to certify that the Major project titled "Soil Stabilization of Black Cotton Soil by Using Granite Powder.**" submitted by the following students**


Urmila Ravindra Kamble.

Vinayak Vaijnath Kharatmol.

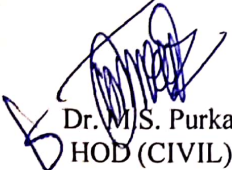
Srushti Shailesh Nimse.

Tejas Ravindra Kirpan.

Has been satisfactorily completed under my supervision in partial fulfillment of the requirements for the award of Bachelor's Degree in Civil Engineering (Semester VIII) conferred by the **UNIVERSITY OF MUMBAI**. In my opinion, the work embodied in this report is a comprehensive fit.


Prof. Nivrutti Jadhav
Guide

20/04/2024


Dr. M.S. Purkar
HOD (CIVIL)



DR D.D. Shinde.
Principal



A
PROJECT REPORT

On

**“Use of Solar Panel on the Road to use the available space and
produce solar energy”.**

Submitted in partial fulfillment of the requirements of curriculum of
BE CIVIL ENGINEERING IN CIVIL

Conferred By
University of Mumbai

SUBMITTED BY

MR. SUDHIR AUTADE (03)

MS. BHARATI JADHAV (18)

MR. PRADEEP MUNDE (31)

MS. KALAYNI PATIL (35)

GUIDED BY

Prof. PRAVIN THORAT



Department of Civil Engineering

Atma Malik Institute Of Technology And Research

Mumbai University (2023-24)

At Mohili Post Aghai, Dist -Thane - 421601

Atma Malik Institute Of Technology And Research

Mumbai University (2023-24)
Department of Civil Engineering



CERTIFICATE

This is to certify that the project Report titled
**“Use of Solar Panel on the Road to use the available space and
produce solar energy”**. *is a bonafide work of*

Done by

MR. SUDHIR AUTADE
MS. BHARATI JADHAV
MR. PRADEEP MUNDE
MS. KALAYNI PATIL

*and is submitted in the partial fulfillment of the requirement for
the degree of*

Bachelor of Engineering In Civil

To the
University of Mumbai

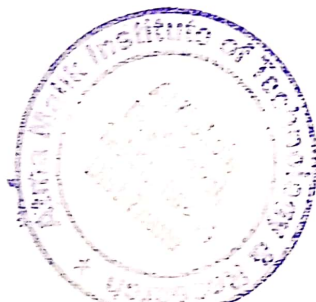
GUIDE

Prof. Pravin Thorat

Head of Department
(Prof. Dr.M.S.Purakar)

Principal
(Dr. Dnyandeo D Shinde)

Project Co-ordinator
(Prof.Soniya Kadam)



A

PROJECT REPORT

ON

**"EXPERIMENTAL INVESTIGATION ON SELF-SUSTAINABLE
BUILDING MATERIAL USED FOR LOW-COST HOUSING"**

Submitted in partial fulfilments of the requirements for the award of the
BACHELOR'S DEGREE (B.E) IN CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

MR. AMIT P. CHAUDHARI [08]

MR. JAYESH R. FASALE [11]

MR. SHUBHAM K.GOND [17]

MR. SAGAR S. THAKARE [40]

GUIDED BY-: PROF PRAVIN THORAT



MUMBAI UNIVERSITY

DEPARTMENT OF CIVIL ENGINEERING

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,

MUMBAI UNIVERSITY

AT-MOHILI, POST-AGHAI, TEL-SHAHAPUR (2023-24)

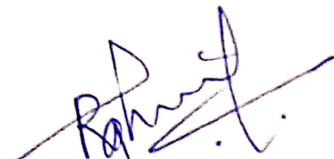


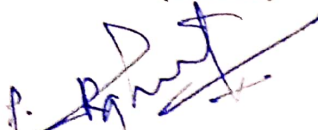
CERTIFICATE


This is to certify that the project “experimental investigation on self-sustainable building material used for low-cost housing” duly submitted by the following students.

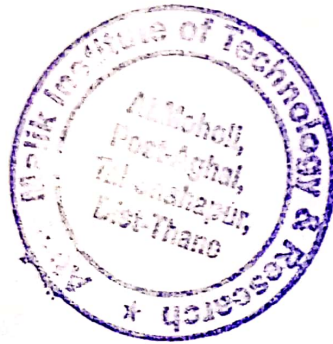
MR. AMIT P. CHAUDHARI	[08]
MR. JAYESH R. FASALE	[11]
MR. SHUBHAM K.GOND	[17]
MR. SAGAR S. THAKARE	[40]

It has been completed under my supervision in a satisfactory manner in a partial fulfilment of the requirements for the award of bachelor's degree in civil engineering, semester VIII to conferred by the university of Mumbai. In my opinion, the work embodied in this report is comprehensive and fit for evaluation.


PROF. PRAVIN THORAT
(GUIDE)


DR. M. S. PURKAR
(HOD.CIVIL)


DR.D.D. SHINDE
(PRINCIPAL)



A
FINAL REPORT
ON
STUDY AND ANALYSIS OF LOW COST HOUSINGS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
BACHELOR OF ENGINEERING IN CIVIL OF
UNIVERSITY OF MUMBAI

SUBMITTED BY
SANSKAR R. JADHAV

UNDER THE GUIDANCE OF
PROF. SONIYA KADAM



DEPARTMENT OF CIVIL ENGINEERING
VISHWATMAK JANGLI MAHARAJ ASHRAM TRUST'S
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
AT MOHILI, POST AGHAI, DIST-THANE.
2023-2024

VISHWATMAK JANGLI MAHARAJ ASHRAM TRUST'S
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
AT MOHILI, POST AGHAL, DIST-THANE.
2023-2024

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project Report titled "STUDY AND ANALYSIS OF LOW COST HOUSING" is bonafide work of,

Mr. Sanskar Ramchandra Jadhav

has been successfully completed in a satisfactory manner in a partial fulfilment of requirements for award of Degree in Civil Engineering conferred by the University Of Mumbai.

Prof. Soniya Kadam
(Project Guide)

Prof. M. S. Purkar
(HOD, Civil Engineering Degree)

Dr. D. D. Shinde
(Principal, AMRIT)



(External Examiner)

II

A
PROJECT REPORT

ON

**"STUDY OF BEHAVIOUR OF STEEL FIBER REINFORCED CONCRETE
IN DEEP BEAM FOR FLEXURES".**

Submitted in partial fulfillment of the requirements of curriculum of

BE CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

Ms. RUCHITA SONAR [37]

Mr. SANKET M. PATIL [36]

Mr. KARAN M. GAIKWAD [13]

Mr. AVINASH B. JETHE [25]

GUIDED BY

Prof. SONIYA KADAM



DEPARTMENT OF CIVIL ENGINEERING

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,

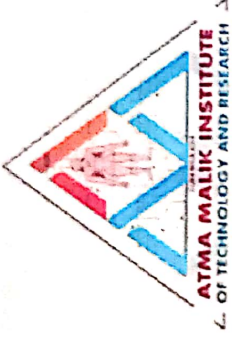
MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAI, DIST-THANE

**ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2022-23)**

AT MOHILI, POST AGHAI, DIST-THANE 2022-2023

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project Report titled **“STUDY OF BEHAVIOUR OF STEEL FIBER REINFORCED CONCRETE IN DEEP BEAM FOR FLEXURE”** is bonafide work of;


Ms. RUCHITA SONAR


Mr. SANKET M. PATIL

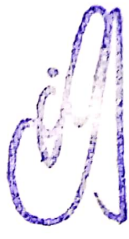
Mr. KARAN M. GAIKWAD

Mr. AVINASH B. JETHE

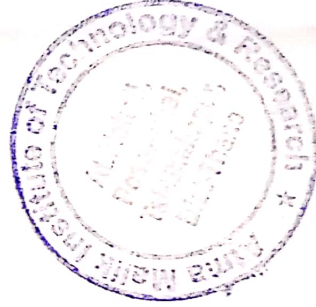
Has successfully completed in a satisfactory manner in a fulfilment of requirements for award of Degree in Civil Engineering conferred by the University of Mumbai.


Prof. SONIYA KADAM
(Project Guide)


Dr. M. S. PURKAR
(HOD, Civil Engineering Degree)



Dr. D.D. SHINDE
(Principal, AMRIT)



MAJOR PROJECT

REPORT

ON

**“USE OF PLASTIC WASTE AS AN AGGREGATE IN
CONCRETE”.**

Submitted in partial fulfillment of the requirements of curriculum of

BE CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

Ms. BHAVIKA SANJAY BHOIR. [05]

Mr. NITESH MARUTI JADHAV. [21]

Ms. POOJA ASHOK JADHAV. [22]

Mr. DIPESH D. THAKARE. [39]

GUIDED BY

Prof. PRAVIN. M. THORAT



DEPARTMENT OF CIVIL ENGINEERING

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,

MUMBAI UNIVERSITY (2023-24)

AT- MOHILI, POST- AGHAI, DIST-THANE 2023-2024

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
AT MOHILI, POST AGHAI, DIST-THANE 2023-2024

DEPARTMENT OF CIVIL ENGINEERING



This is to certify that the Project Report titled "USE OF PLASTIC WASTE AS AN
AGGREGATE IN CONCRETE" is bonafide work of;

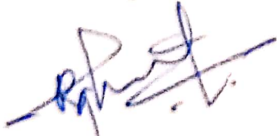
Ms. BHAVIKA SANJAY BHOIR.

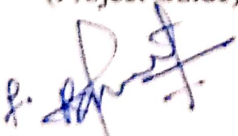
Mr. NITESH MARUTI JADHAV.

Ms. POOJA ASHOK JADHAV.


Mr. DIPESH D. THAKARE.

Has successfully completed in a satisfactory manner in a partial fulfilment of requirements for
award of Degree in Civil Engineering conferred by the Mumbai University.


Prof. P. M. THORAT
(Project Guide)


Dr. M.S. PURKAR

(HOD, Civil Engineering Degree)


Dr. D.D. SHINDE

(Principal, AMRIT)



MAJOR PROJECT

ON

CASE STUDY ON SMART DRIP IRRIGATION SYSTEM

Submitted in partial fulfilment of the requirement of curriculum of

B.E IN CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

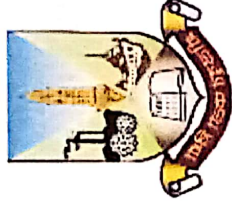
SUBMITTED BY

MOHAK ANIL JADHAV [20]

YASH JAGDISH JADHAV [24]

GUIDED BY

Prof. SONIYA KADAM



UNIVERSITY OF MUMBAI

DEPARTMENT OF CIVIL ENGINEERING

Atma Malik Institute of Technology & Research

AT MOHILI, POST AGHAI, DIST - THANE 2023-24

Atma Malik Institute of Technology & Research

MUMBAI UNIVERSITY (2023-24)

DEPARTMENT OF CIVIL ENGINEERING



This is certify that the Project Report titled is “CASE STUDY ON SMART DRIP IRRIGATION SYSTEM” bonafide work of`

MOHAK ANIL JADHAV

YASH JAGDISH JADHAV

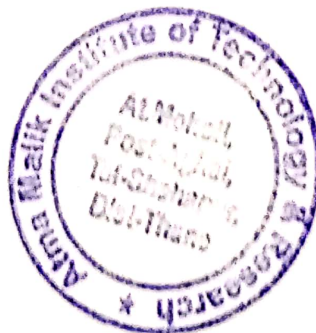
Has successfully completed in a satisfactory manner in partial fulfilment of requirement for award of Degree in Civil Engineering conferred by the University of Mumbai

Prof.SONIYA KADAM

(Project Guide)

Dr. M.S. PURKAR

(HOD CIVIL ENGG)



Dr.D.D SHINDE

(Principle AMRIT)

A
PROJECT REPORT
ON

“Study and analysis of Low Cost Housing”

Submitted in partial fulfillment of the
Requirement for the award of the

Bachelors Degree In Civil Engineering

SUBMITTED BY

Amol A. Jadhav
Sachin S. Patil

GUIDED BY

Prof. Soniya Kadam

Conferred by



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
AT: MOHILI, POST: AGHAI, SHAHAPUR, DIST: THANE
(2023-2024)

VISHWATMAK JANGLI MAHARAJ ASHRAM TRUST
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Major project titled "Study and analysis of Low Cost Housing" duly submitted by the following students are

Amol Atmaram Jadhav
Sachin Shantaram Patil

has been completed under my supervision in a satisfactory manner in a partial fulfillment of the requirements for the award of **Bachelor's Degree in Civil Engineering** to be conferred by the **University of Mumbai**. In my opinion, the work embodied in this report is comprehensive and fit for evaluation.

Prof. Soniya Kadam
(Project Guide)

Dr. M.S.Purkar.
(HOD Civil)



Dr. D.D.Shinde.
(Principal)

A
PROJECT REPORT
ON
"AN EXPERIMENTAL STUDY ON SELF COMPACTING CONCRETE"

Submitted in partial fulfillment of the
Requirement for the award of the
BACHELOR'S DEGREE IN CIVIL ENGINEERING

SUBMITTED BY

Dhanashree. P. Bhoir.

Priyanka. S. Misal.

Vihar. S. Mithbavkar

Chirag. S. Patil

GUIDENCE BY

Prof. Soniya Kadam

Conferred by

University of Mumbai



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
AT: MOHILI, POST: AGHAI, SHAHAPUR, DIST: THANE
(2023-2024)

VISHWATMAK JANGLI MAHARAJ ASHRAM TRUST
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH
DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Major project titled "An Experimental Study on Self Compacting Concrete" duly submitted by the following students are

Dhanashree. P. Bhoir.
Priyanka. S. Misal.
Vihar. S. Mithbavkar.
Chirag. S. Patil.

has been completed under my supervision in a satisfactory manner in a partial fulfillment of the requirements for the award of **Bachelor's Degree in Civil Engineering** to be conferred by the **University of Mumbai**. In my opinion, the work embodied in this report is comprehensive and fit for evaluation.

Prof. Soniya Kadam.
(Project Guide)

Dr. M. S. Purkar.
(HOD Civil)



Dr. D. D. Shinde.
(Principal)

A
PROJECT-REPORT

ON

“AN EXPERIMENTAL STUDY OF CONCRETE MIXED WITH COCONUT
SHELL AS PARTIAL REPLACEMENT OF
COARSE AGGREGATE”

Submitted in partial fulfillment of the requirements of curriculum of

BE CIVIL ENGINEERING

Conferred by

UNIVERSITY OF MUMBAI

SUBMITTED BY

Ms. AKANKSHA K. GAIKWAD [12]

Ms. MEGHA D. PADGHA [33]

Ms. NIKITA H. TELIVARE [38]

GUIDED BY

Prof. SONIYA KADAM



DEPARTMENT OF CIVIL ENGINEERING
ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAI, DIST-THANE 2023-2024

ATMA MALIK INSTITUTE OF TECHNOLOGY AND RESEARCH,
MUMBAI UNIVERSITY (2023-24)

AT MOHILI, POST AGHAL, DIST-THANE 2023-2024

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project Report titled is "AN EXPERIMENTAL STUDY OF CONCRETE MIXED WITH COCONUT SHELL AS PARTIAL REPLACEMENT OF COARSE AGGREGATE" bonafide work of;

Ms. AKANKSHA GAIKWAD

Ms. MEGHA PADGHA

Ms. NIKITA TELIVARE

Has successfully completed in a satisfactory manner in a partial fulfilment of requirements for award of Degree in Civil Engineering conferred by the University of Mumbai

Prof. SONIYA KADAM
(Project Guide)

Dr. M. S. PURKAR

(HOD, Civil Engineering Degree)

Dr. D.D. SHINDE

(Principal, AMRIT)