



Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

NAAC Accredited with 'A++' Grade

Ph.: 07104-242919, 242623, 242588

Website : www.ycce.edu E-mail : principal@ycce.edu

## Summary of 3.1.2

The institution provides seed money to its teachers for research:

3.1.2. 1 Seed money provided by the institution to its teachers for research during the year (INR in lakhs):


Year 2022-2023

(INR In Lacks) 15.03

Supporting Documents

- 1.Sanction Letters of the seed money for the Proposal
- 2.Project Documents



  
Principal  
Yeshwantrao Chavan  
College of Engineering  
Wanadongri Hingna Road,  
NAGPUR - 441110

# **Index-3.1.2**

## **2023-24**

<b>Sr. No</b>	<b>Name of Supporting Document</b>	<b>Page Nos.</b>
1.	Sanction Letters of the Seed Money for the Proposal	<b>1-57</b>
2.	Project Documents	<b>58-165</b>



# **Sanction Letters of the Seed Money for the Proposal**

# YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

R&D Cell, YCCE, Nagpur

Date: 5/6/2023

To,  
The Principal  
YCCE, Nagpur


Subject: Request for approval of budget for In-house funding schemes for 2023-24

Respected Sir,

This is for your kind information that, as every year, this year also we need to float In-house funding schemes. The schemes include 1. In-house Minor Research and Product Development, 2. Innovative UG/PG Project Scheme, 3. Innovative Experimental Setup scheme, 4. Innovative Minor Patentable Project scheme. Details of the proposed budget is as follows:

SN	Scheme	Budget in Lakhs
1	In-house Minor Research and Product Development	7.00
2	Innovative UG/PG Project Scheme	2.00
3	Innovative Experimental Setup scheme	3.00
4	Innovative Minor Patentable Project scheme	3.00
Total		15.00

It is requested that the budget proposed In-house funding schemes for 2023-24 of Rs. 15 Lakhs may please be approved.

  
Dr. Ujwala Gawande


Dean R & D

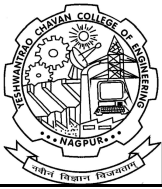


Dr. U.P. Waghe

Principal

may be approved  
Chief Advisor, MGE

As per  
budget  




## Office of Dean-Research and Development

Date: 05 Sep 2023

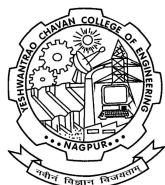
### Minutes of Meeting

A review meeting was conducted in Board Room, YCCE at 11.30 AM on 02 September 2023 for review of proposals submitted under following scheme for possible seed funding.

1. Innovative Experiment Set up
2. Innovative Minor Patentable Product/Project
3. Minor Research and Product Development
4. Innovative UG/PG Project

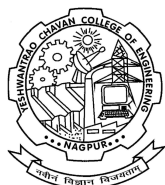
The following committee members reviewed the proposal

1. Dr. U. H. Gawande, Dean, R and D
2. Dr. P. T. Karule, EE, Department
3. Dr. K. K. Bhojar, CSE Department
4. Dr. S. R. Khandeshwar, CE Department
5. Dr. C. S. Gode, ET, Department
6. Dr. S. D. Patil, EL Department
7. Dr. S. T. Bagde, ME Department
8. Dr. V. Y. Ganvir, Physics Department
9. Dr. Y. U. Chitriv, Asst. Dean, FPD, R and D
10. Dr. N. D. Rehpade, Asst. Dean, IPRD, R and D

**Office of Dean-Research and Development**

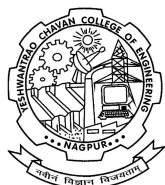
Following are the remarks of the review committee for the recommendation of the proposal submitted under Innovative Experimental Setup Scheme

SN	Name of Faculty	Dept	Title of the Proposal	Amount Approved	Remarks by Committee
1.	Dr. Prachi P. Palsodkar	EE	Development of next generation intelligent device solutions with embedded Machine Learning	9,887/-	Recommended
2.	Dr. Bharati N. Patil	Physics	To find the wavelength of laser using a thin wire of unknown thickness	20,000/-	Recommended
3.	Mrs. Trupti D. Tembhakar	EL			Absent
4.	Mrs. Trupti D. Tembhakar	EL			Absent
5.	Sanjivini Panditkar	Applied Chemistry			Absent

**Office of Dean-Research and Development**

Following are the remarks of the review committee for the recommendation of the proposal submitted under Innovative Minor Patentable and Product Development Scheme

SN	Name of Faculty	Dept.	Title of the Proposal	Amount Sanctioned	Remarks by Committee
1.	Mrs. Nivedita A. Pande	ETC	Automatic Robotic Cleaner	16,019/-	Recommended
2.	Mr. Abhishek A. Madankar	ETC	Detection of Vata Dosha using Urine Sample	21,600/-	Recommended
3.	Mr. Devendra Shahare	ME	Multipurpose Medicine Carriers Container	30,000/-	Recommended
4.	Mr. Bhushan U. Bawankar	IT	Nadi Pariksha: Diseases Prediction System	16,500/-	Recommended
5.	Mr. Sagar W. Dhengare	CV	Development of Quaternary Concrete	30,000/-	<ul style="list-style-type: none"><li>• <b>Shift to Minor Research &amp; Product development</b></li><li>• Innovative idea for replacement of cement properties needs to be investigate for waste</li><li>• Recommended</li></ul>
6.	Mr. Sanjay P. Pande	CT	Road Condition Monitoring System	-	Revise, Resubmit & Represent
7.	Mr. Sanjay P. Pande	CT	Home Security System	-	Revise, Resubmit & Represent
8.	Mr. Roshan Bhanushe	CT	Driver Drowsiness Detection System using Machine Learning	-	<ul style="list-style-type: none"><li>• Literature review is required to prove innovation idea</li><li>• Revise, Resubmit &amp; Represent</li></ul>
9.	Mrs. Swati K. Mohod	EL	Refrigerant Based Air Cooler	-	<ul style="list-style-type: none"><li>• Add Innovative Component</li><li>• Revise and Resubmit and Represent</li></ul>
10.	Mr. Aniket Munshi	EL	Solar Based Running Zebra Crossing System	-	<ul style="list-style-type: none"><li>• Add Innovative Component</li><li>• Revise, Resubmit and Represent</li></ul>
11.	Mrs. Shweta L. Tiwari	EL	Solar Powered wireless Electric Vehicle G2V charging System	-	<ul style="list-style-type: none"><li>• Rejected</li><li>• Submit new idea and Represent</li></ul>
12.	Mr. Rohan Khonde	EL			<b>Absent</b>

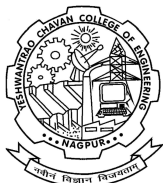


## Office of Dean-Research and Development

Following are the remarks of the review committee for the recommendation of the proposal submitted under **Minor Research and Product Development Scheme**

SN	Name of Faculty	Dept.	Title of the Proposal	Amount Sanctioned	Remarks by Committee
1.	Dr. Prasanna M. Palsodkar/ Dr. Prachi P. Palsodkar	EE	Edge Device based Audio synthesis for detection of cough intensity	25,000/-	Recommended
2.	Dr. Nischal P. Mungale	ME	Performance Investigation Of Solar Dryers For Agriculture Food Product And Green Hurbes	30,000/-	Recommended
3.	Mr. Chetan A. Mahatme	ME	A 3-D Printed Training Device for Medical Professionals for Simulating Effective Lumbar Puncture Procedure	10,000/-	Recommended
4.	Mr. Gopal H. Waghmare	ME	Design and Fabrication Of Reusable Functional And Effective Wrist Orthosis	25,000/-	Recommended
5.	Mr. Dilip I. Sangotra	ME	Fabrication and Analysis of Aqua Silencer	25,000/-	Recommended
6.	Mr. Surendra S. Nagpure	ME	Cloth Drying Machine	20,500/-	<ul style="list-style-type: none"><li>• Shift to Minor Patentable Product/Project Scheme</li><li>• Recommended</li></ul>
7.	Mr. Sanket G. Kalamkar	CE	Enhancing quality of Stormwater using Pervious Concrete and base layer of Agro-industrial Wastes Materials	20,000/-	Recommended
8.	Mrs. Minal S. Ghute	ET	Design of Drowning rescue alert system	14,000/-	<ul style="list-style-type: none"><li>• Shift to Innovative UG/PG Project Scheme</li><li>• Recommended</li></ul>





## Office of Dean-Research and Development

9.	Mr. Dhiraj K. Thote	ET	Agriculture Robot using IoT	15,000/-	<ul style="list-style-type: none"><li>• Shift to Minor Patentable Product/Project Scheme</li><li>• Recommended</li></ul>
10.	Mr. Yogesh S. Kale	ET	Integrating Environmental Sensors using LORA Technology for Industrial Applications	-	<ul style="list-style-type: none"><li>• Shift to Innovative Minor Patentable Product/ Project Development</li><li>• Revise the proposal for short range and resubmit</li></ul>
11.	Mr. Vaibhav R. Doifode	EL	Pumpless Cooler	-	<ul style="list-style-type: none"><li>• Shift to Innovative UG/ PG Project Scheme</li><li>• Revise the budget and resubmit</li></ul>
12.	Ms. Kavita Gudadhe	IT			<b>Absent</b>



# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110  
Ph: 07104 237919, 234623, 329249, 329250 Fax: 07104 232376, Website: www.ycce.edu

Research and Development Cell

g  
/)



Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110  
Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Office of Dean-Research and Development

Following are the remarks of the review committee for the recommendation of the proposal submitted under Innovative UG/PG Project Scheme

SN	Name of Faculty	Department	Title of the Proposal	Amount Requested	Remarks by Committee
1.	Dr. Tejaswini Panse	EE	Water Quality Assessment and Monitoring System	19,000/-	Recommended
2.	Mr. Vijay G. Thakre	ME	Design and Fabrication of Weeding Robot for Agriculture Application	25,000/-	Not Recommended
3.	Mr. Nilesh U. Sambhe	CT	Voice Over Internet Protocol (VoIP) based IPBX system design	25,000/-	<ul style="list-style-type: none"> <li>• Shift to Innovative Experimental Setup</li> <li>• Recommended</li> </ul>
4.	Mr. Jiwan N. Dehankar	CSE	Food Cold Storage Monitoring and Analysis System	-	<ul style="list-style-type: none"> <li>• Need to clear the ownership of the project and IPR Issue</li> <li>• Revise, Resubmit and Represents</li> </ul>
5.	Dr. Boskey Bahoria	CV			Absent
6.	Ms. Divya Kantode	IT			Absent

It is therefore requested to approve the amount mentioned above under In-house schemes of MGI.

*Yogita Chitriv*  
05/09/2023

Dr. Yogita Chitriv  
Assistant Dean, FPD, R and D

*Nita Rehpade*

Dr. Nita Rehpade  
Assistant Dean, IPR, R and D



Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Office of Dean-Research and Development

Forwarded for approval

Through,

*Ujwala* 05/09/2023

Dr. Ujwala Gawande  
Dean, R and D

*U. P. Waghe*

Dr. U. P. Waghe

Principal, YCCE

Encl.

1. Approval of budget for In- house funding schemes

**Office of Dean-Research and Development****Minutes of the Meeting**

Date: 25 Sep 2023

A review meeting is conducted in Board Room, YCCE at 10.30 AM on 23 September 2023 for review of proposal submitted by faculty under following schemes for possible seed funding.

1. Innovative Experiment Set up
2. Innovative Minor Patentable Product
3. Minor Research and Product Development
4. Innovative UG/PG Project

The following committee members reviewed the proposal

- Dr. U. H. Gawande, Dean, R and D
- Dr. N. V. Thakur, CT Department
- Dr. K. K. Bhoyar, CSE Department
- Dr. S. S. Choudhari, ME Department
- Dr. R. M. Moharil, EL Department
- Dr. J. M. Raut, CE Department
- Dr. Y. U. Chitriv, Asst. Dean, FPD, R and D
- Dr. N. D. Rehpade, Asst. Dean, IPRD, R and D

Following are the review comments by Expert Members

**Innovative Experimental Set**

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mrs. T. D. Tembhekar	Electrical Engineering	Generate Electricity by Non-Biodegradable Waste	Revise, Review by RAB and Resubmit	-
2.	Mrs. T. D. Tembhekar	Electrical Engineering	Not Presented		-
3.	Sanjivini Panditkar	Applied Chemistry		Absent	-

**Office of Dean-Research and Development****Innovative Minor Patentable Project**

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mrs. S. K. Mohod	Electrical Engineering	Refrigerant Base Air Cooler	Revise the Budget	-
2.	Mr. Sanjay P. Pande	Computer Technology	Deep Learning Approach for Road Condition Detection	Revise, review by RAB and resubmit	-
3.	Mr. Sanjay P. Pande	Computer Technology	Deep Learning Based Home Security System	Revise, review by RAB and resubmit	-
4.	Mrs. S. L. Tiwari	Electrical Engineering	Improved Wireless Electric Vehicle Charging System	Recommended	20,000/-
5.	Mr. Nilesh Gedam	Mechanical Engineering	Multistation Power Generation by VAWT	Recommended	20,000/-
6.	Mr. Roshan Bhanushe	Computer Technology	Driver Downiness Detection System using Holistic Method Driver	Revise, review by RAB and resubmit	-
7.	Mr. Aniket Munshi	Electrical Engineering	-	Absent	
8.	Mr. Rohan Khonde	Electrical Engineering	-	Absent	

**Innovative UG PG Project**

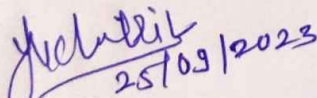
SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mr. V. R. Doifode	Electrical Engineering	-	Absent	-
2.	Dr. Boskey Bahoria	Civil Engineering	-	Absent	-
3.	Mr. V. G. Thakre	Mechanical Engineering	-	Absent	-
4.	Ms. Divya Kantode	Information Technology	Airline Chatbot	No Funding is required hence not considered in this scheme	-
5.	Mr. J. N. Dehankar	Computer Science and Engineering	Food Cold Storage Monitoring and analysis System	Recommended subject to the condition IPR and prototype with YCCE	20,000/-

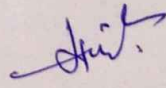
**Office of Dean-Research and Development****Minor Research and Product Development**

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Ms. Kavita Gudadhe			Absent	
2.	Dr. Girish Thote	Mechanical Engineering	Study and Development of Rapid Thyroid, Testing Machine for efficient and accurate diagnosis of Hypothermia/underactive thyroid	Recommended	40,000/-
3.	Mr. Nilesh Gedam	Mechanical Engineering	Design and Fabrication Dynamic Adjustable Height Speed Breaker with Speed Detection System	Not Recommended	-
4.	Mrs. Megha Sawangikar	Applied Chemistry	Investigation of Soil Carbon in Agriculture land and suggest the appropriate solution of its improvement	Recommended Subject to condition of joint collaboration with IIT, Bombay	40,000/-

It is therefore requested to approve the amount as per the details mentioned below under In-house schemes of MGI.

1. Innovative Experimental Scheme: NIL
2. Innovative Minor Patentable Project : 40,000/-
3. Innovative UG PG Project : 20,000/-
4. Minor Research and Product Development : 80,000/-

  
25/09/2023  
Dr. Yogita Chitriv  
Assistant Dean, FPD, R and D

  
Dr. Nita Rehpade  
Assistant Dean, IPR, R and D





## Office of Dean-Research and Development

Forwarded for approval

Through,

*Ujwala Gawande*  
25/09/2023

Dr. Ujwala Gawande  
Dean, R and D

*U. P. Waghe*

Dr. U. P. Waghe

Principal, YCCE

Encl.

1. Approval of budget for In- house funding schemes


**Office of Dean-Research and Development****Minutes of the Meeting**

Date: 07 December 2023

A review meeting is conducted in ET and EL Department at 2.00 PM on 01 and 04 December 2023 for review of proposal submitted by faculty under following schemes for possible seed funding.

1. Innovative Experiment Set up
2. Innovative Minor Patentable Product
3. Minor Research and Product Development
4. Innovative UG/PG Project

The following committee members reviewed the proposal

- Dr. U. H. Gawande, Dean, R and D 
- Dr. R. M. Moharil, EL Department
- Dr. V. G. Meshram, CE Department
- Dr. P. T. Karule, EE Department
- Dr. Y. U. Chitriv, Asst. Dean, FPD, R and D
- Dr. N. D. Rehpade, Asst. Dean, IPRD, R and D

Following are the review comments by Expert Members

**Innovative UG PG Project**

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mr. Vaibhav R. Doifode	Electrical Engineering	Solar Powered Smart Refrigerator	Recommended	24,650/-
2.	Dr. Boskey Bahoria	Civil Engineering	Investigation of Acoustic Material for the Design and Development of Sound Absorbing Bricks	Recommended	25,000/-
3.	Mr. V. G. Thakre	Mechanical Engineering	-	Absent	-



# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Office of Dean-Research and Development

### Innovative Minor Patentable Project

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mrs. S. K. Mohod	Electrical Engineering	Refrigerant Base Air Cooler	Recommended	18,500/-
2.	Mr. Sanjay P. Pande	Computer Technology	Deep Learning Approach for Road Condition Detection	Absent	-
3.	Mr. Sanjay P. Pande	Computer Technology	Deep Learning Based Home Security System	Absent	-
4.	Mr. Roshan Bhanuse	Computer Technology	Adaptive ML Model for Drowsiness Detection using Developed ML Model Based on Created Dataset	Recommended	11,500/-
5.	Mr. Aniket Munshi	Electrical Engineering	Solar Based Running Zebra Crossing System	Recommended	14,890/-
6.	Mr. Rohan Khonde	Electrical Engineering	Surface Solar Bricks	Recommended	18,750/-
7.	Mr. Yogesh Kale	Electronics and Telecommunication	Multiple Output Voltage Current Supply	Recommended	12,932/-

### Innovative Experimental Set

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Mrs. T. D. Tembhekar	Electrical Engineering	-	Absent	-
2.	Mrs. T. D. Tembhekar	Electrical Engineering	-	Absent	-
3.	Sanjivini Panditkar	Applied Chemistry	-	Absent	-

### Minor Research and Product Development

SN	Name of Faculty	Department	Title of the Proposal	Comments	Amount Sanctioned
1.	Ms. Kavita Gudadhe	Information Technology	Early Prediction of Diabetes by Machine Learning	No Funding is required hence not considered in this scheme	-





# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycoe.edu

## Office of Dean-Research and Development

2.	Dr. Jayant M. Raut	Civil Engineering	Dual Stage Drilling Mechanism for Construction of Pile Foundation	Recommended	50,000/-
----	--------------------	-------------------	---	-------------	----------

It is therefore requested to approve the amount as per the details mentioned below under In-house schemes of MGI.

1. Innovative Experimental Scheme: NIL
2. Innovative Minor Patentable Project : 76,572/-
3. Innovative UG PG Project : 49,650/-
4. Minor Research and Product Development : 50,000/-

Dr. Yogita Chitriv  
Assistant Dean, FPD, R and D

Dr. Nita Rehpade  
Assistant Dean, IPR, R and D

Forwarded for approval

Through,

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal, YCCE

Encl.

1. Approval of budget for In- house funding schemes



Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph. 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 533

Date: 18 September 2023

To

**Mr. Sagar W. Dhengare**  
**Civil Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Mr. Sagar W. Dhengare

We are pleased to inform you that your proposal titled **Development of Quaternary Concrete** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 30,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Civil Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 534

Date: 18 September 2023

To

**Dr. Prasanna M. Palsodkar/ Dr. Prachi P. Palsodkar**  
**Electronics Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Dr. Prasanna M. Palsodkar/ Dr. Prachi P. Palsodkar

We are pleased to inform you that your proposal titled **Edge Device Based Audio Synthesis for Detection of Cough Intensity** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 535

Date: 18 September 2023

To

**Dr. Nischal P. Mungale**

**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Dr. Nischal P. Mungale

We are pleased to inform you that your proposal titled **Performance Investigation of Solar Dryers for Agriculture Food Product and Green Hurbes** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 30,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitri  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuvak Bhavan Samithi's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph. 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: [www.ycce.edu](http://www.ycce.edu)

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 536

Date: 18 September 2023

To

**Mr. Chetan A. Mahatme**  
**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Mr. Chetan A. Mahatme

We are pleased to inform you that your proposal titled **A 3-D Printed Training Device for Medical Professionals for Simulating Effective Lumbar Puncture Procedure** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 10,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 537

Date: 18 September 2023

To

**Mr. Gopal H. Waghmare**  
**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Mr. Gopal H. Waghmare

We are pleased to inform you that your proposal titled **Design and Fabrication of Reusable Functional and Effective Wrist Orthosis** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 538

Date: 18 September 2023

To

**Mr. Dilip I. Sangotra**

**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Mr. Dilip I. Sangotra

We are pleased to inform you that your proposal titled **Fabrication and Analysis of Aqua Silencer** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Bhudhan Bhantha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 539

Date: 18 September 2023

To

**Mr. Sanket G. Kalamkar**

**Civil Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Minor Research & Product Development

Dear Mr. Sanket G. Kalamkar

We are pleased to inform you that your proposal titled **Enhancing Quality of Stormwater using Pervious Concrete and Base Layer of Agro-Industrial Wastes Materials** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Civil Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 540

Date: 18 September 2023

To

**Mr. Dhiraj K. Thote**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Dhiraj K. Thote

We are pleased to inform you that your proposal titled **Agriculture Robot using IoT** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 15,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Research and Development Cell

Date: 18 September 2023

YCCE/R and D Cell/2023-24/ 541

To

**Mrs. Nivedita A. Pande**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mrs. Nivedita A. Pande

We are pleased to inform you that your proposal titled **Automatic Robotic Cleaner** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 16,019/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 542

Date: 18 September 2023

To

**Mr. Abhishek A. Madankar**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Abhishek A. Madankar

We are pleased to inform you that your proposal titled **Detection of Vata Dosha using Urine Sample** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 21,600/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 543

Date: 18 September 2023

To

**Mr. Devendra Shahare**  
**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Devendra Shahare

We are pleased to inform you that your proposal titled **Multipurpose Medicine Carriers Container** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 30,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 544

Date: 18 September 2023

To

**Mr. Bhushan U. Bawankar**

**Information Technology**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Bhushan U. Bawankar

We are pleased to inform you that your proposal titled **Nadi Pariksha: Diseases Prediction System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 16,500/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Information Technology**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 545

Date: 18 September 2023

To

**Mr. Surendra S. Nagpure**

**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Surendra S. Nagpure

We are pleased to inform you that your proposal titled **Cloth Drying Machine** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,500/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 546

Date: 18 September 2023

To

**Mr. Yogesh S. Kale**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Yogesh S. Kale

We are pleased to inform you that your proposal titled **Integrating Environmental Sensors using LORA Technology for Industrial Applications** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,150/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE





Nagar Yuvak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/531

Date: 18 September 2023

To

**Mrs. Minal S. Ghute**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative UG/ PG Project

Dear Mrs. Minal S. Ghute

We are pleased to inform you that your proposal titled **Design of Drowning Rescue Alert System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 14,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha'n

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph. 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 532

Date: 18 September 2023

To

**Dr. Tejaswini Panse**

**Electronics Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative UG/ PG Project

Dear Dr. Tejaswini Panse

We are pleased to inform you that your proposal titled **Water Quality Assessment and Monitoring System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 19,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 528

Date: 18 September 2023

To

**Dr. Prachi Palsodkar**

**Electronics Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Set up

Dear Dr. Prachi Palsodkar

We are pleased to inform you that your proposal titled **Development of Next Generation Intelligent Device Solutions with Embedded Machine Learning** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 9,887/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics Engineering** YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 529

Date: 18 September 2023

To

**Mr. Nilesh U. Sambhe**

**Computer Technology**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Set up

Dear Mr. Nilesh U. Sambhe

We are pleased to inform you that your proposal titled **Voice Over Internet Protocol (VoIP) Based IPBX System Design** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe

Principal,

Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Computer Technology**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph. : 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 530

Date: 18 September 2023

To

**Dr. Bharati N. Patil**

**Physics Department**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Experimental Set up

Dear Dr. Bharati N. Patil

We are pleased to inform you that your proposal titled **Wavelength Measurement of Laser using a Thin Wire of Unknown Thickness** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Physics Department**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 672

Date: 10 October 2023

To

**Mr. Nilesh Gedam**

**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mr. Nilesh Gedam

We are pleased to inform you that your proposal titled **Multistation Power Generation by VAWT** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's  
**Yeshwantrao Chavan College of Engineering**

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Research and Development Cell

YCCE/R and D Cell/2023-24/ 673

Date: 10 October 2023

To

**Mr. J. N. Dehankar**

**Computer Science and Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative UG PG Project**

Dear Mr. J. N. Dehankar

We are pleased to inform you that your proposal titled **Food Cold Storage Monitoring and analysis System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Computer Science and Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's  
**Yeshwantrao Chavan College of Engineering**

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

Research and Development Cell

YCCE/R and D Cell/2023-24/ 674

Date: 10 October 2023

To

**Dr. Girish Thote**

**Mechanical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Minor Research and Product Development**

Dear Dr. Girish Thote

We are pleased to inform you that your proposal titled **Study and Development of Rapid Thyroid, Testing Machine for efficient and accurate diagnosis of Hypothermia/underactive thyroid** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 40,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Mechanical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 675

Date: 10 October 2023

To

**Mrs. Megha Sawangikar**

**Applied Chemistry**

Subject: Approval of Proposal submitted under In-House Scheme of **Minor Research and Product Development**

Dear Mrs. Megha Sawangikar

We are pleased to inform you that your proposal titled **Investigation of Soil Carbon in Agriculture land and suggest the appropriate solution of its improvement** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 40,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Applied Chemistry**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/ 676

Date: 10 October 2023

To

**Mrs. S. L. Tiwari**

**Electrical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of Innovative Minor Patentable Project

Dear Mrs. S. L. Tiwari

We are pleased to inform you that your proposal titled **Improved Wireless Electric Vehicle Charging System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 20,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean, IPR  
Division

Dr. Yogita Chitriv  
Assistant Dean,  
Funding Proposal

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electrical Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/910

Date: 06 December 2023

To

**Mrs. S. K. Mohod**

**Electrical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative Minor Patentable Project**

Dear Mrs. S. K. Mohod

We are pleased to inform you that your proposal titled **Refrigerant Base Air Cooler** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 18,500/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean,  
IPR Division

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electrical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/911

Date: 06 December 2023

To

**Mr. Roshan Bhanuse**

**Computer Technology**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative Minor Patentable Project**

Dear Mr. Roshan Bhanuse

We are pleased to inform you that your proposal titled **Adaptive ML Model for Drowsiness Detection using Developed ML Model Based on Created Dataset** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 11,500/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean,  
IPR Division

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Computer Technology**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/912

Date: 06 December 2023

To

**Mr. Aniket Munshi**

**Electrical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative Minor Patentable Project**

Dear Mr. Aniket Munshi

We are pleased to inform you that your proposal titled **Solar Based Running Zebra Crossing System** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 14,890/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean,  
IPR Division

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electrical Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/913

Date: 06 December 2023

To

**Mr. Rohan Khonde**

**Electrical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative Minor Patentable Project**

Dear Mr. Rohan Khonde

We are pleased to inform you that your proposal titled **Surface Solar Bricks** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 18,750/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean,  
IPR Division

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electrical Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/314

Date: 06 December 2023

To

**Mr. Yogesh Kale**

**Electronics and Telecommunication**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative Minor Patentable Project**

Dear Mr. Yogesh Kale

We are pleased to inform you that your proposal titled **Multiple Output Voltage Current Supply** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 12,932/-**

You are requested to initiate the work on the project at the earliest.

Dr. Nita Rehpade  
Assistant Dean,  
IPR Division

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electronics and Telecommunication**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/915

Date: 06 December 2023

To

**Mr. Vaibhav R. Doifode**

**Electrical Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative UG PG Project**

Dear Mr. Vaibhav R. Doifode

We are pleased to inform you that your proposal titled **Solar Powered Smart Refrigerator** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 24,650/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Electrical Engineering**, YCCE
- A/C Section, YCCE







Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/916

Date: 06 December 2023

To

**Dr. Boskey Bahoria**

**Civil Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Innovative UG PG Project**

Dear Dr. Boskey Bahoria

We are pleased to inform you that your proposal titled **Investigation of Acoustic Material for the Design and Development of Sound Absorbing Bricks** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 25,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Civil Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph.: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

## Research and Development Cell

YCCE/R and D Cell/2023-24/917

Date: 06 December 2023

To

**Dr. Jayant M. Raut**

**Civil Engineering**

Subject: Approval of Proposal submitted under In-House Scheme of **Minor Research and Product Development**

Dear Dr. Jayant M. Raut

We are pleased to inform you that your proposal titled **Dual Stage Drilling Mechanism for Construction of Pile Foundation** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 53,000/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwalla Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of **Civil Engineering**, YCCE
- A/C Section, YCCE





Nagar Yuwak Shikshan Sanstha's  
**Yeshwantrao Chavan College of Engineering**

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongri, Nagpur - 441 110

Ph: 07104-237919, 234623, 329249, 329250 Fax: 07104-232376, Website: www.ycce.edu

**Research and Development Cell**

YCCE/R and D Cell/2023-24/ 919

Date: 06 December 2023

To

**Mr. Fazil Sheikh**

Computer Science and Engineering

Subject: Approval of proposal submitted under In-House Scheme of **Minor Research and Product Development**

Dear Mr. Fazil Sheikh

We are pleased to inform you that your proposal titled **A Smart Safety Jacket for Bikers** is recommended by the committee for approval and the proposal is approved for financial assistance of **Rs. 32,778/-**

You are requested to initiate the work on the project at the earliest.

Dr. Yogita Chitriv  
Assistant Dean, Funding  
Proposal Division

Dr. Ujwala Gawande  
Dean, R and D

Dr. U. P. Waghe  
Principal

Principal,  
Yeshwantrao Chavan College of Engineering  
Hingna Road, Wanadongri,  
Nagpur - 441110

Copy To

- HoD, Department of Computer Science and Engineering, YCCE
- A/C Section, YCCE



# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,  
N A G P U R - 441110

## Cost Centre: Electronics & Telecomm. [ E & T ]

Under Ledger: Student Project Expenses

1-Sep-2023 to 31-Mar-2024

Page 1  
Credit

Date	Particulars	Vch Type	Vch No.	Debit
20-9-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 853	19,845.00
	Student Project Expenses	19,845.00 Dr		
	Ghute Minal S.	19,845.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-IoT Based Pet Daycare Robot- Student Name-Shreyas Deshpande, Abhishek Sondawle, Mayur Deshmukh &amp; Swaraj Bhaleraof 4 No.s Student</i>			
	Cr (as per details)	JOURNAL_	YCCE/ JV- 854	18,336.00
	Student Project Expenses	18,336.00 Dr		
	Niranjane Vaishali	18,336.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Canal Water data monitoring and controlling ssystem- Shivam Patil &amp; Manish Bhosale &amp; Trushant Dharpure Rutik Pawar- 4 Nos student</i>			
	Cr (as per details)	JOURNAL_	YCCE/ JV- 855	14,514.00
	Student Project Expenses	14,514.00 Dr		
	Pande N. A.	14,514.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Voice Controller Elevator with solar Backup and SoS messanging-Shubhankar Gupta &amp; Vaishanavi Jadhav &amp; Janhavi Chikhalkar &amp; Riya Waghmare - 4 Nos Students</i>			
	Cr (as per details)	JOURNAL_	YCCE/ JV- 856	6,333.00
	Student Project Expenses	6,333.00 Dr		
	Dorge Prabhakar	6,333.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Smart Shoe for human fall detection and prevention- Dhanshri Nasre &amp; Priya Sawarkar &amp; Vrushali Talkhande &amp; Harshita Nedunuri- 4 Nos Student</i>			
	Cr (as per details)	JOURNAL_	YCCE/ JV- 857	3,646.00
	Student Project Expenses	3,646.00 Dr		
	MASRAM BHARATI	3,646.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Overloading detection in transport Vehicles- Aakansha Nimje &amp; Amita Raut &amp; Neha Mehatre &amp; Sayli Humane-4 Nos Student</i>			
	Cr (as per details)	JOURNAL_	YCCE/ JV- 858	21,851.00
	Student Project Expenses	21,851.00 Dr		
	Thote Dhiraj K	21,851.00 Cr		
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-MEMS Gesture controlled Robot- Nandini Farkade &amp; Vedant Khobragade &amp; Mehul Mahakalkar &amp; Shubhangi Tayade- 4 nos of Students</i>			

Carried Over

Page 49 of 165

84,525.00

contin



Date	Particulars	Vch Type	Vch No.	Debit	Credit
	Brought Forward			84,525.00	
20-9-2023	Cr <b>Student Project Expenses</b> <i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Developing a sliding gate using CV &amp; ML Technologies- Utkarsh Dafe &amp; Pranav Sawarkar &amp; Manu Varghese &amp; Nandini Sakhare- 4 nos of Students</i>	JOURNAL_	YCCE/ JV- 859	13,819.00	
	Cr <b>(as per details)</b> <b>Student Project Expenses</b> Dubey Y. K./ Chitriv	JOURNAL_ 9,866.00 Dr 9,866.00 Cr	YCCE/ JV- 860	9,866.00	
	<i>being Expenses submitted by Dept of E &amp; T Student - Project NameFootprint Count using face Recognition- Samruddhi Uplapwar &amp; Nikita Parate &amp; Saloni Giratkar &amp; Yashaswi Rewatkar-4 nos of Student</i>				
	Cr <b>(as per details)</b> <b>Student Project Expenses</b> Dubey Y. K./ Chitriv	JOURNAL_ 8,260.00 Dr 8,260.00 Cr	YCCE/ JV- 861	8,260.00	
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Android App for heart disease Prediction using ML- Sukhada Ajmire &amp; Vedika Mathurkar &amp; Sayalee Ambulkar &amp; Chinmayee Didolkar- 4 nos of Students</i>				
	Cr <b>(as per details)</b> <b>Student Project Expenses</b> Madankar A A	JOURNAL_ 12,579.00 Dr 12,579.00 Cr	YCCE/ JV- 862	12,579.00	
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Electronics Midi Pad- Shreyas Kothiwari &amp; Rohit Rahangdale &amp; Ishani Zoting &amp; Mansi Madan- 4 nos of Students</i>				
	Cr <b>(as per details)</b> <b>Student Project Expenses</b> Madankar A A	JOURNAL_ 12,108.00 Dr 12,108.00 Cr	YCCE/ JV- 863	12,108.00	
	<i>being Expenses submitted by Dept of E &amp; T Student - Project Name-Vata dosh detection- Sainath Gunde &amp; Vibha Bopche &amp; Leenal Nikhare &amp; Payal Parate- 4 nos of Students</i>				
16-3-2024	Dr <b>Student Project Expenses</b> <i>Received from Minal Ghute Being ch received as per DFC counter No. c -12 dtd 16.03.2024</i>	Bank Receipt	YCCE/BR/ 1305		19,845.00
				1,41,157.00	19,845.00
	Dr <b>Closing Balance</b>			1,41,157.00	1,21,312.00
				<u>1,41,157.00</u>	<u>1,41,157.00</u>



# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,  
NAGPUR - 441110

## Cost Centre: Civil Department [ C E ]

Under Ledger: Student Project Expenses

1-Apr-2023 to 31-Mar-2024

Page 1

Date	Particulars	Vch Type	Vch No.	Debit	Credit
14-8-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 657	2,300.00	
	Student Project Expenses	2,300.00 Dr			
	Nandurkar Bhupesh	2,300.00 Cr			
	6 nos				
	<i>"being amount of Project Expenses submitted by Dept of Civil [Rs. 2300/- Topics-Light Weight Concrete using EPS Beads- Student Name -Sejal Nagpure, Sneha Sonawane, Srushti Balki, Rushikesh Bhubatwar, Rohit Singanjude &amp; Swaraj Naware- 6 Nos]</i>				
	"				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 658	24,569.00	
	Student Project Expenses	24,569.00 Dr			
	Bhagat Madhuri S	8,677.00 Cr			
	6 nos				
	Bhagat Madhuri S	15,892.00 Cr			
	6 nos				
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.8677/- Topics-Design &amp; Development of a Water Conservation Model -Student Name - Ritika Thakur , Smaruddhi Moundekar , Soundaryya Meshram, &amp; Nishan Joseph, Shubhamk Tonge &amp; Tanmay Kawekar &amp; Rs.15892/- Topics-Design and Development of a Solid Waste Recycling Model and Bumer Student Name- Komal Talmale, Shital Gotefode, Kalpak Dongre, Krishna Harinkhede, Swapnil Bhujade &amp; Nikhil Badwaik</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 659	36,160.00	
	Student Project Expenses	36,160.00 Dr			
	Raut Sanjay Padmakar	15,762.00 Cr			
	Raut Sanjay Padmakar	20,398.00 Cr			
	<i>"being amount of Project Expenses submitted by Dept of Civil [Rs.15762/- Topics- Development of Concrete panel Using TextileEffuent Studge-Student Name -Ashitosh Mishra, Nikhl kate, Vikas Madke, Swapnil Debre, , Darshana Ingale, - 6nos &amp; Rs. 20398 /- Topics-Development of Sustainable Bricks using Textile Effuent Studge- Student Name-Atharva Shahade, Shardul Naidu, Siddeesh Kulkami- 3 Nos</i>				
	"				

Carried Over

63,029.00

continued ...

Date	Particulars	Vch Type	Vch No.	Debit	Credit
	Brought Forward			63,029.00	
14-8-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 600	15,727.00	
	Student Project Expenses	15,727.00 Dr			
	Mendhe Vaishali N	15,727.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.15727/- Topics- to Study the Flexural Strength and Compressive Strength of Bamboo Fiber, Steel Fiber, Limestone, and Hybrid Composite -Student Name --Ayush kanekar, Samin Dahlikar, Sanket Khadse, Sudhansh Wasade, &amp; Swamin Ghadse] 5 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 601	19,433.00	
	Student Project Expenses	19,433.00 Dr			
	Waghmare Charuta S	19,433.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.19433/- Topics- Performance Evaluation of Pomegranate Peel Bio Adsorbent for Removal of Dye from Aqueous Solution-Student Name -[Sanskuti Lohakare, Sejal Wagh, Vrushali Sowkuwar, Ankit Aghav, Gaurav Sarkar, Hardik Shendre 6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 662	6,461.00	
	Student Project Expenses	6,461.00 Dr			
	ANSARI KHALID SHAMIM	6,461.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.6461/- Topics-Experimental Study on Composing of tea waster, and its optimization by Taguchi method-Student Name-Rutuj Jivlode, Ashwini Kakade, Chahul Danao, Mrunal Bobde, Sanket Sondawale &amp; Sohel Khan- 6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 663	15,830.00	
	Student Project Expenses	15,830.00 Dr			
	Raut Jayant M	15,830.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.15830/- Topics-Effect of Variation in Rainfall, Intensity of slope Stability in India-Student Name-Sejal Dhanvijay, Arnab Kumar, Aryan Kumar, Kailash dharmik, Saurabh Channo, Aman Mahant- 6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 664	16,050.00	
	Student Project Expenses	16,050.00 Dr			
	Agrawal Dhiraj G	16,050.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.-16050/- Topics-Investigation of Durability of Ruberized Concrete-Student Name-Aman Mahant, Abhishek Rathod, Aniket Khobragade, Harshal Upawat, kapil Zode &amp; Sanajy Sagar &amp; Prashik Vaidya 6 nos]</i>				

Carried Over

1,36,530.00

continued ...

Date	Particulars	Vch Type	Vch No.	Debit	Credit
	Brought Forward			1,36,530.00	
14-8-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 665	2,340.00	
	Student Project Expenses	2,340.00 Dr			
	Hinge Pawan	2,340.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.-2340/- Topics-Experimental Investigationon Use of Elecronics Waste in high Strength Concrete-Student Name-Avanti Patre, Gajal vuinulkar, Samikha Dahule, Roshan Kolhe Samyak Chandankhede-5 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 666	39,749.00	
	Student Project Expenses	39,749.00 Dr			
	Meshram Sangita S	39,749.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.-39749/- Topics-Development and Small Scale, Model House using Cupola Stag-Student Name- -Viplao Gharade, Prasad Bhogekar, Rudeprakash Khandere,Samyak Pusare, Soham Banshpal &amp; Yogesh Kosare-6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 667	21,191.00	
	Student Project Expenses	21,191.00 Dr			
	Pande Prashant B.	16,191.00 Cr			
	Pande Prashant B.	5,000.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.-16191/- Topics-Casting and analysis of Brick by using Foam Agent and Adhesive Cement -Student Name-Anchal Shirke, kasif Patel, Sahrood Pathan, Amer Shaikh, Vaishanvani Tonge, Shabab Pathan-6 nos &amp; Topics- Casting and Analysis of Hollow Fly Ash Bricks- Name of the Students- Jagdish Anchal Chinmay Chitanwar, Jay Bhore, Omakr Potdar, Pragag Bhave, Deepali Dhage-6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 668	12,740.00	
	Student Project Expenses	12,740.00 Dr			
	Kurzekar Atual S	12,740.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.12740/- Topics-An Experinmental Investigation on Artificial Aggregate Concrete- Student Name -Aishware Bobade, Nikita Chaware, Shravani Danav, Abhinav Thakare, Abhishek Shelke &amp; Chaitanya Kakde- 6 nos ]</i>				

Carried Over

2,12,550.00

continued ...



Date	Particulars	Vch Type	Vch No.	Debit	Credit
	Brought Forward			2,12,550.00	
14-8-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 669	30,449.00	
	Student Project Expenses	30,449.00 Dr			
	Chakole Pallavi S.	14,849.00 Cr			
	Chakole Pallavi S.	15,600.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.-14849/- Topics-comparative Study of Rotating Biological Contactor for Treatment of Wasterwater using Different Midias-Student Name -Khsuhi Pawar, nadshri ladke, Jandardhan Purva, Abhimanyu Bhanot, Nishan Badly, Prajwal Jikate, -6 nos &amp; Rs, 15600/-Topics-Treat of Dairy Wastewater by Rotating Biological Contractor - Students Name- Hittul Vaidya , Bhisahn Dhoble, Pranay Shankar, Rushikesh Ghime, Shival Dakhale &amp; Shreyas Joshi-6 nos]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 670	8,518.00	
	Student Project Expenses	8,518.00 Dr			
	Kamble Snehal K	8,518.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.8518/- Topics-Comparative Study of Physicochemical Properties of Sewage Studge form Sewage Treatment palnt- Student Name -Aman kadbe, paunikar amol, Govind Sharma, Samayak Gaidwad, Saurabhi Chawane, Saurabh Bhonde- 6 nos ]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 671	11,800.00	
	Student Project Expenses	11,800.00 Dr			
	Kalamkar Sanket G	11,800.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.11800- Topics- Development of Previous ConcreteUsing Industrial Waser to Enhance Water Quality- Student name- Anjali Gabhane, Dhanashree Sawarkar, Sejal bhoyar, Rohit Sahu, Rutuj Khawas &amp; Siddhey Phatkar-6 nos ]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 672	5,310.00	
	Student Project Expenses	5,310.00 Dr			
	WAGH Monali R	5,310.00 Cr			
	<i>being amount of Project Expenses submitted by Dept of Civil [Rs.5310/- Topics- Study on Self Compacting Concreteusing bagasse Ash, Metakoalin and glass Fiber- Student name-Dilip Kartik, Abshiek Chavan , Mahesh bhinge, Shreyas Goswami &amp; Vrushabh Mohod &amp; RAmleke Paras-6 nos ]</i>				
				2,68,627.00	
Dr	Closing Balance				2,68,627.00
				2,68,627.00	2,68,627.00



# Yeshwantrao Chavan College of Engineering

Hingna Road Wanadongri,

N A G P U R - 441110

## Cost Centre: Electronics Engg.[ E E ]

Under Ledger: Student Project Expenses

1-Apr-2023 to 31-Mar-2024

Page 1

Date	Particulars	Vch Type	Vch No.	Debit	Credit
28-6-2023	<b>Cr (as per details)</b>	JOURNAL_	YCCE/ JV- 418	4,354.00	
	<b>Student Project Expenses</b> 4,354.00 Dr				
	<b>Palsodkar Prachi P.</b> 4,354.00 Cr				
	<i>being amount of Project Expense submitted by Student for Topic- Streetlight Energy Conservation and Line following Car[ [Robo Studio- 142-11.07.2022- Rs. 227.40/- &amp; 270 -27.10.22-Rs.944/- &amp; 376-26.12.2022-Rs. 1132.80/- [ Atharva Kulkarni, Dhanshree Joshi, Amish kale &amp; Madhav Tejpal &amp; Sakshi Nagdive- 5 nos.]</i>				
	<b>Cr (as per details)</b>	JOURNAL_	YCCE/ JV- 419	29,971.00	
	<b>Student Project Expenses</b> 29,971.00 Dr				
	<b>Panse T G</b> 29,971.00 Cr				
	<i>being amount of Project Expense submitted by Student for Topic- Fire Extinguisher Drone[navdurga Electrical &amp; Rewinding Works -Inv No. 069-dt. 02.08.2022 for Rs. 1140/- &amp; Amazon .in Inv No. DEL4-41130-16.07.2022 for Rs. 358/- Robu.In-Tax Inv No.. Inv2223 /60630-17.07.2022 for Rs. 2929/- &amp; Yuvraj Global Traders-Inv No. 0567-27.07.22-R. 3200/- &amp; Robu.In-Tax Inv No. Inv2223 /146381-20.12.2022-Rs. 7013/- &amp; Robu.In-Inv No. Inv2223/59848-15.07.2022-Rs. 15331/- &amp; [Bhushan Sable, Shreyas Tarudkar, Harshada Thakare, Ankit Nagdeote &amp; Tarkeshwar Satdeve- 5 nos.]</i>				
	<b>Cr (as per details)</b>	JOURNAL_	YCCE/ JV- 420	4,593.00	
	<b>Student Project Expenses</b> 4,593.00 Dr				
	<b>Tijare Ankita</b> 4,593.00 Cr				
	<i>being amount of Project Expense submitted by Student for Topic- Soldier Robot[Robu In -Tax Inv No. 2223/62970-20.07.2022-Rs. 2624/- &amp; ElectronicsComp.com- Inv No. Inv -22-23/45827-21.07.2022-Rs. 1969.42/- [Yash Parate, Mohit chandekar, Runal Yerpude, Amar Nankani &amp; Ankita Dongre- 5 nos.]</i>				
	Carried Over				38,918.00

Date	Particulars	Vch Type	Vch No.	Debit	Credit
	Brought Forward			38,918.00	
28-6-2023	Cr (as per details)	JOURNAL_	YCCE/ JV- 421	7,181.00	
	Student Project Expenses			7,181.00 Dr	
	Gaidhani Y. A.			7,181.00 Cr	
	<i>being amount of Project Expense submitted by Student for Topic- Data Transmission using Li-Fi- Technology [Engineers lab-Tax Inv NO. FE-01-14.03.2023 [ Gauri Dambhare, Riya Singh, Ajay Khot, Tushar Waghmare- 4 nos.]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 422	9,358.00	
	Student Project Expenses			9,358.00 Dr	
	Pande K. G.			9,358.00 Cr	
	<i>being amount of Project Expense submitted by Student for Topic- Zigbee Based Controlling and Monitoring Systems[Engineers lab-Tax Inv NO. FE-01-25.02.2023 [ Shruti Joshi, Dhiraj Dave, shrutika Paunikar &amp; Mayant Raut- 4 nos.]</i>				
	Cr (as per details)	JOURNAL_	YCCE/ JV- 423	3,080.00	
	Student Project Expenses			3,080.00 Dr	
	Thakare R D			3,080.00 Cr	
	<i>being amount of Project Expense submitted by Student for Topic- IOT Based Monitoring of Fruit Freshness using Arduino Uno[Engineers lab-Tax Inv No. 003-16.01.2023 for Rs. 2780/- &amp; 007-16.01.2023 for Rs. 300/- [ Soham katae, Hitesh Meshram Dip Paliwal, Shreyas Suryawanshi &amp; Rushbh HUmane- 5 nos.]</i>				
				58,537.00	
Dr	Closing Balance				58,537.00
				<b>58,537.00</b>	<b>58,537.00</b>



Nagar Yuwak Shikshan Sanstha's  
**Yeshwantrao Chavan College of Engineering**  
(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

(Accredited 'A' Grade by NAAC)  
Hingna Road, Wanadongri, Nagpur - 441 110

**DEPARTMENT OF MECHANICAL ENGINEERING (Project: 2022-23)**

**NOTE**

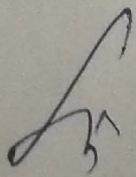
DATE:12-07-2024

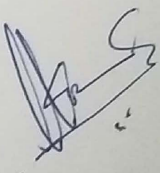
**SUBJECT:** Sanction of Expenditure regarding UG project for session 2023-24.

The following is the Expenditure incurred for completion of UG project for the session 2023-24.

SR.	PROJECT GUIDE	TITLE OF THE PROJECTS	TOTAL BILL AMOUNT
1	Prof. V. M. Korde	Investigation of Drying curve of pearl millet, sorghum & green peas using fluidized bed dryer	10176
2	Prof. R. V. Adakane	Design of fabrication of automatic Cercals Weighing & Packaging Machine.	41475.00
3	Prof. R. V. Adakane	Automated Comnod Cleaning System	16026.00
		<b>Total</b>	<b>67677.00</b>

FOR NA  
GOURNA  
02-08  
AL

  
(Dr. J. P. Giri)  
HOD ME

  
(V. M. KORDE)  
Co-Ordinator

# **Project Documents**



# **IOT based Pet Daycare Robot**

*This project report is submitted to*

*Yeshwantrao Chavan College of Engineering*

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in Electronics & Telecommunication Engineering**

*By*

**Shreyas Deshpande  
Abhishek Sondavle  
Mayur Deshmukh  
Swaraj Bhalerao**

*Under the guidance of*

**Prof. M.S. Ghute**



**Department of Electronics & Telecommunication Engineering**

Nagar Yuwak Shikshan Sanstha's

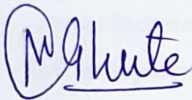
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University,  
Nagpur)

**NAGPUR – 441110**

**2022-23**

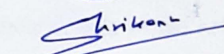
## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled "IOT Based Pet Daycare Robot" has been successfully completed by **Shreyas Deshpande, Abhishek Sondavle, Swaraj Bhalerao, Mayur Deshmukh** under the guidance of **Prof. M.S. Ghute** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



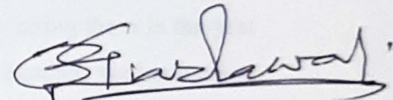
Signature

**Prof. Minal S. Ghute**  
**Project Guide**



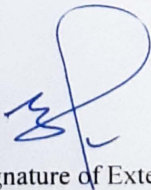
Signature

**Mr. Shrikant Bhandarkar**  
**Electus Technologies**



Signature

**Dr. M.S. Narlawar**  
**HOD ET Dept**



Signature of External Examiner

Name:- **S. A. Bogal.**

Date of Examination:



# **Canal Water Data Monitoring and Controlling System.**

*This project report is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)  
In partial fulfillment of the requirement for the award of the degree*

*of*

**Bachelor of Engineering in Electronics & Telecommunication  
Engineering**

*by*

**Mr. Shivam Devanand Patil.  
Mr. Trushant Vinayak Dharpure.  
Mr. Manish Dnyoba Bhosle.  
Mr. Rutik Murlidhar Pawar.**

*Under the guidance of*

**Prof. Vaishali Niranjane.**



**DEPARTMENT OF Electronics & Telecommunication Engineering**  
Nagar Yuwak Shikshan Sanstha's  
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)  
**NAGPUR – 441 110**  
**2022-2023**

## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled “Canal Water Data Monitoring and Controlling System.” has been successfully completed by **Shivam Patil, Trushant Dharpure, Manish Bhosle, Rutik Pawar** under the guidance of **Prof. Vaishali Niranjane** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



**Prof. V. B. Niranjane**  
**Project Guide**



**Mr. Pravin Zod**  
**Project Co guide**



**Dr. M. S. Narlawar**  
**HoD, ET Dept.**



Signature of External Examiner

Name: **Dr Bharati B. Sayankar**

Date of Examination: **06/06/2023**



# Voice Controlled Elevator with Solar Backup and SOS Messaging

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering, Nagpur**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement  
for the award of the degree  
Of*

**Bachelor of Engineering in Electronics & Telecommunication  
Engineering**

*By*

**Shubhankar Guha  
Janhavi Chikhalkar  
Vaishnavi Jadhav  
Riya Waghmare**

*Under the guidance of*

**Prof. Nivedita Pande**



**DEPARTMENT OF Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,  
Nagpur)**

**NAGPUR – 441 110**

**2022-2023**

## CERTIFICATE OF APPROVAL

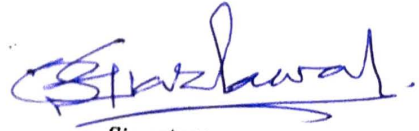
This is to Certify that the project report entitled “**Voice Controlled Elevator with Solar Backup and SOS Messaging**” has been successfully completed by **Janhavi Chikhalkar, Riya Waghmare, Vaishnavi Jadhav and Shubhankar Guha** under the guidance of **Prof. Nivedita Pande** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**.



*Signature*

**Prof. Nivedita Pande**

**Project Guide**



*Signature*

**Dr. M. S. Narlawar**

**HOD ET Dept**



**Signature of External Examiner**

**Name: -**

**Date of Examination:**

# **Smart Shoe for Human Fall Detection and Prevention**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*of*

**Bachelor of Engineering in Electronics & Telecommunication Engineering**

*by*

**Dhanshri Narse**

**Harshita Nedunuri**

**Priya Sawarkar**

**Vrushali Talkhande**

*Under the guidance of*

**Dr. Prabhakar D. Dorge**

**Dr. Kiran Pettewar**  
**Dhanwantari Clinic, Nagpur**



**DEPARTMENT OF Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**


**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University, Nagpur)**


**NAGPUR – 441 110**


**2022-2023**

## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled “**Smart Shoe for Human Fall detection and Prevention**” has been successfully completed by **Dhanshri Narse, Harshita Nedunuri, Priya Sawarkar and Vrushali Talkhande** under the guidance of **Dr. Prabhakar D. Dorge** and **Dr. Kiran Pettewar** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**

  
Dr. P. D. Dorge  
(Guide)

  
Dr. Kiran Pettewar  
(Co-Guide)

  
Dr. M. S. Narlawar  
(HoD, ET Dept.)

  
Signature of External Examiner:

Name: **Dr. A.C. Kailuke**

Date of Examination: **06/06/2023**



# Overloading Detection in Transport Vehicles

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement for the award of the degree*

*of*

**Bachelor of Engineering in Electronics & Telecommunication  
Engineering**

*by*

**Aakansha Nimje**

**Arpita Raut**

**Neha Mehatre**

**Sayli Humane**

*Under the guidance of*

**Dr. B. Y. Masram**



**DEPARTMENT OF Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University,  
Nagpur)*

**NAGPUR – 441 110**

**2022-2023**

Page 66 of 165

## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled "Overloading Detection in Transport Vehicles" has been successfully completed by Aakansha Nimje, Arpita Raut, Neha Mehatre, Sayli Humane under the guidance of Dr. Bharati Y. Masram in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).



Dr. B. Y. Masram  
(Guide)



Mr. Kiran Shinde (RTO Officer)  
(Co-Guide)



Dr. M. S. Narlawar  
(HoD, ETDept.)

Signature of External Examiner



Name:- Dr. P. D. Khondait

Date of Examination: 05/06/23

# ELECTRONIC NOSE - FOR INDUSTRIAL SAFETY

This project report is submitted to

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

*In partial fulfillment of the requirement For the award of the degree*

*of*

Bachelor of Engineering in Electronics &  
Telecommunication Engineering

*by*

Unnati Singh , Anagha Kalejwar, Renuka Bhingare, Rujuta Baxy

*Under the guidance of*

**Prof. Dhiraj Thote**



DEPARTMENT OF Electronics & Telecommunication  
Engineering

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF  
ENGINEERING,

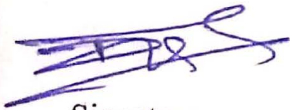
(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

NAGPUR – 441 110

2022-2023

## Certificate Of Approval

This is to Certify that the project report entitled "Electronic Nose - For Industrial Safety" has been successfully completed by **Unnati Singh, Anagha Kalejwar, Renuka Bhingare, Rujuta Baxy** under the guidance of **Prof. Dhiraj Thote** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Signature

**Prof. D.K.Thote**

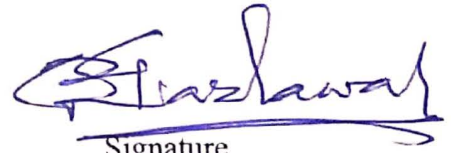
(Guide)



Signature

Mr. Anand Patil

(Co Guide/Industry Person )



Signature

Dr.M.S.Narlawar

(HOD, ET Dept.)



Signature of External Examiner

Name:-

D. N. S. Aurbakh

Date of Examination:



# **AUTOMATIC WASTE SEGREGATOR AND MONITORING SYSTEM**

*This project report is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)  
In partial fulfilment of the requirement  
For the award of the degree  
Bachelor of Engineering in Electronics & Telecommunication Engineering*

*of*

**Bachelor of Engineering in Electronics & Telecommunication  
Engineering**

*by*

**Prarthi Manish Joshi  
Ayushi Prashant Dharmik  
Sayali Sunil Wade**

*Under the guidance of*

**Prof. D. K. Thote**



**Department of Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University,  
Nagpur)**

**NAGPUR – 441 110**

**2022-23**

## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled "Automatic Waste Segregator and Monitoring System" has been successfully completed by Prarthi Manish Joshi, Ayushi Prashant Dharmik and Sayali Sunil Wade under the guidance of Prof. D. K. Thote in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature

**Prof. D. K. Thote**

(Guide)



Signature

**Dr. Gajendra Mahalle**

(Co Guide)



Signature

**Dr. M. S. Narlawar**

(HoD, ET Dept.)



Signature of External Examiner

Name:- **Dr. N. S. Ambath**

Date of Examination: **27/05/2023**

# DEPLOYING A SLIDING GATE BY UTILIZING COMPUTER VISION AND MACHINE LEARNING TECHNIQUES

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in Electronics and Telecommunication Engineering**

*By*

**Utkarsh Dafe  
Nandini Sakhare  
Manu Varghese  
Pranav Sawarkar**

*Under the guidance of*

**Prof. Yogesh Kale (Guide)**

**Prof. Devendra Shahare (Co-guide)**



**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

**Nagar Yuwak Shikshan Saustha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

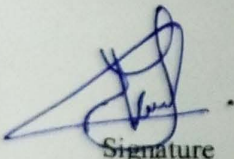
**NAGPUR – 441 110**

**2022-23**

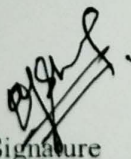


## CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEPLOYING A SLIDING GATE BY UTILIZING COMPUTER VISION AND MACHINE LEARNING TECHNIQUES" has been successfully completed by **UTKARSH DAFE, NANDINI SAKHARE, MANU VARGHESE, PRANAV SAWARKAR** under the guidance of **PROF. YOGESH KALE** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Electronics and Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)**.



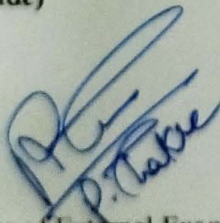
Signature  
**Prof. Y. S. Kale**  
(Guide)



Signature  
**Prof. Devendra Shahare**  
(Co-guide)



Signature  
**Dr. M. S. Narlawar**  
(HOD, ETC Dept.)



Signature of External Examiner:

Name: **Prasheel Thakre**

Date of Examination: **05/06/2023**



# **"FOOTPRINT COUNT USING FACE RECOGNITION"**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement For the award of the degree  
of*

**Bachelor of Engineering in Electronics & Telecommunication Engineering**

*by*

**Saloni Giratkar**

**Samruddhi Uplapwar**

**Yashaswi Rewatkar**

**Nikita Parate**



**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**


**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)**

**NAGPUR – 441 110**

**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "**Footprint Count Using Face Recognition**" has been successfully completed by **Saloni Giratkar, Yashaswi Rewatkar, Samruddhi Uplapwar, Nikita Parate** under the guidance of **Dr. Yogita Chitriv (Dubey)** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronic & Telecommunication Engineer, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)**

  
Signature


**Dr. Yogita Chitriv (Dubey)**  
(Guide)

  
Signature

**Ms. Neelam Mulmuley**  
(Co-guide)

  
Signature

**Dr. M.S. Narlawar**  
(HOD ET Dept.)

Signature of External Examiner: 

Name: **Dr. P. P. D. D. D. D.**

Date of Examination **05/06/23**

# **Android App for Heart Disease Prediction Using Machine Learning Algorithms**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfilment of the  
requirement for the award of the degree*

*Of*

**Bachelor of Engineering in Electronics & Telecommunication Engineering**

*by*

**Vedika Mathurkar  
Sukhada Ajmire  
Sayalee Ambulkar  
Chinmayee Didolkar**

*Under the guidance of*

**Dr. Yogita Chitriv (Dubey)**



**DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING**

*Nagar Yuwak Shikshan Sanstha's*

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441 110**

**2022-2023**

## CERTIFICATE OF APPROVAL

This is to Certify that the project report entitled “**Android App For Heart Disease Prediction Using Machine Learning Algorithms**” has been successfully completed by **Vedika Mathurkar, Sukhada Ajmire, Sayalee Ambulkar , Chinmayee Didolkar,** Under The Guidance Of **Dr. Yogita Chitriv (Dubey)** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**

Signature

**Dr. Yogita Chitriv (Dubey)**

Guide

Signature

**Dr. Nandkishor Bankar**

Co-Guide

Signature

**Dr. M. S. Narlawar**

HOD

Signature of External Examiner:

Name: **Dr. N. S. Ambekar**

Date of Examination:



# Detection of Vata dosha using Blood sample

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in Electronics & Telecommunication Engineering**

*By*

**Sainath Gunde  
Leenal Nikhare  
Vibha Bopche  
Payal Parate**

*Under the guidance of*

**Prof. A. A. Madankar**



**Department of Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

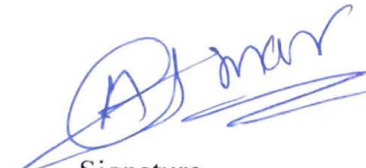
**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)**

**NAGPUR – 441110**

**2022-2023**

## CERTIFICATE OF APPROVAL

This is to certify that the project report entitled "Detection of vata dosha using blood sample" has been successfully completed by **Sainath Gunde, Vibha Bopche, Leenal Nikhare and Payal Parate** under the guidance of **Prof. A. A. Madankar and Dr. Arun Wankhede** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Signature

**Prof. A. A. Madankar**

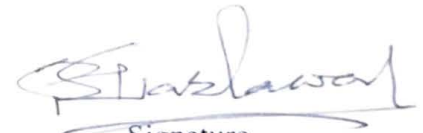
(Guide)



Signature

Dr. Arun Wankhede

(Co Guide)



Signature

Dr. M. S. Narlawar

(HoD, ET Dept.)



Signature of External Examiner:

Name:

Date of Examination:

# ELECTRONIC MIDI PAD

*This project report is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)  
In partial fulfillment of the requirement for the award of the degree*

*of*

**Bachelor of Engineering in Electronics & Telecommunication  
Engineering**

*by*

**Shreyas Kothiwan  
Rohidas Rahangdale  
Ishani Zoting  
Mansi Madavi**

*Under the guidance of*

**Prof. Abhishek Madankar**



**DEPARTMENT OF Electronics & Telecommunication Engineering**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

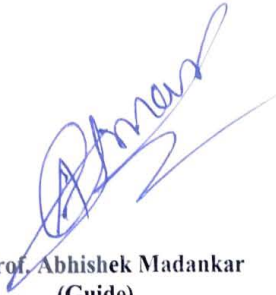
**(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)**

**NAGPUR – 441 110**


**2022-2023**

## CERTIFICATE OF APPROVAL

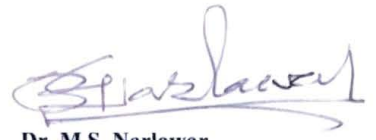
This is to Certify that the project report entitled “**Electronic Midi Pad**” has been successfully completed by **Shreyas Kothiwan, Rohidas Rahangdale, Mansi Madavi, Ishani Zoting** under the guidance of **Prof. Abhishek. Madankar** in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Electronics & Telecommunication Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Prof. Abhishek Madankar  
(Guide)



Mr. Rahul Koradkar  
(Co-Guide)



Dr. M.S. Narlawar  
(HOD)



Signature of External Examiner

Name:

Date of Examination:



# LIGHT WEIGHT CONCRETE USING EPS BEADS

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

*In partial fulfillment of the requirement  
For the award of the degree*

*of*

**Bachelor of Technology in Civil Engineering**

*By*

<b>Sneha Sonwane</b>	<b>Swaraj Naware</b>
<b>Rohit Singanjude</b>	<b>Rushikesh Bhujbatkar</b>
<b>Sejal Nagpure</b>	<b>Srushti Balki</b>

*Under the guidance of*  
**Prof. B.P. Nandurkar.**



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,  
Nagpur)

**NAGPUR – 441 110**

**2022-2023**

## CERTIFICATE OF APPROVAL

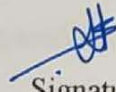
Certified that the project report entitled "**LIGHT WEIGHT CONCRETE USING EPS BEADS**" has been successfully completed by **Sneha Sonwane, Rohit Singanjude, Sejal Nagapure, Swaraj Naware, Rushikesh Bhujbatkar, Srushti Balki** under the guidance of Prof. B.P.Nandurkar in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Signature

Dr. B.P. Nandurkar

(Guide)



Signature

Prof. Snehal Kamble

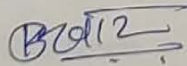
(Coordinator)



Signature

Dr. S.P. Raut

(HoD)



Signature of External Examiner

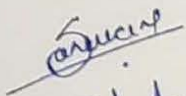

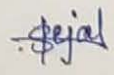
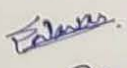
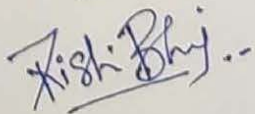
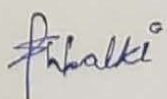
Name **PROF. KAMLESH V. MADURWAR**

Date of Examination: **05/06/2023**

## DECLARATION

I/ We certify that,

- a. We have done the work contained in this project under the guidance of our supervisors.
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have confirmed the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Name of Student	Enrollment Number	Signature Of Students
1. Sneha Sonwane	19010305	
2. Rohit Singanjude	19010165	
3. Sejal Nagapure	19010403	
4. Swaraj Naware	19011047	
5. Rushikesh Bhujbatkar	19010670	
6. Srushti Balki	19010750	

# DESIGN AND DEVELOPMENT OF SOLID WASTE RECYCLING MODEL

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)*

*In partial fulfillment of  
the requirement For the  
award of the degree*

*Of*

**Bachelor of Engineering in Civil Engineering**

*By*

**Swapnil Bhujade**

**Nikhil Bidwaik**

**Kalpak Dongare**

**Krishna Harinkhede**

**Komal Talmale**

**Shital Gotefode**

*Under the guidance of*

**Prof. Dr. Ms. M.S. Bhagat**



**DEPARTMENT OF CIVIL ENGINEERING**

**Nagar Yuwak Shikshan Santa's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)*

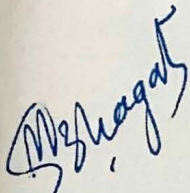
**NAGPUR – 441 110**

**2022-23**



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "DESIGN AND DEVELOPMENT OF WASTE RECYCLING MODEL" has been successfully completed by Swapnil Bhujade, Nikhil Bidwaik, Kalpak Dongare, Krishna Harinkhede, Komal Talmale, Shital Gotefode under the guidance of Prof. Dr. Ms. M. S. Bhagat in recognition to the partial fulfillment for the award of the degree of Master of Technology in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature

Name of Guide

**Prof. Dr.  
Ms. M. S.  
Bhagat**

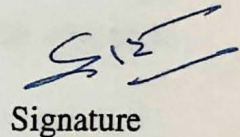
—  
Signature

Name of Co-Guide (Co-Guide)



Name of Co-ordinator

**Prof. Ms. S. K.  
Kamble**



Signature

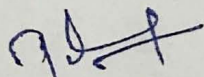
Name of Head of Dept

**Prof. Dr. S. P.  
Raut**

Signature of External Examiner

Name

Date of Examination



P. Bisen

P. Bisen

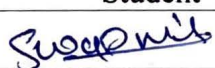
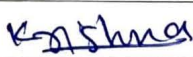
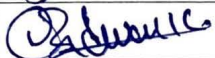
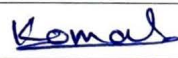


2/6/23

## DECLARATION

I / we certify that

- The work contained in this project has been done by me under the guidance of my supervisor(s).
- The work has not been submitted to any other Institute for any degree or diploma.
- We have followed the guidelines provided by the Institute in preparing the project report.
- We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- Whenever We have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Signature of the Student/ s

Name of the student	Signature of the Student	Name of the student	Signature of the Student
1. Swapnil Bhujade		4.. Krishna Harinkhede	
2. Nikhil Bidwaik		5 .Komal Talmale	
3. Kalpak Dongare		6. Shital Gotefode	



# DESIGN AND DEVELOPMENT OF WATER CONSERVATION MODEL

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering, Nagpur**

*(An Autonomous Institution Affiliated with Rashtrasant Tukadoji Maharaj  
Nagpur University)*

*In partial fulfilment of the requirement*

*for the award of the degree*

*of*

**Bachelor of Engineering in Civil Engineering**

*By*

1) Ritika Thakur

3) Soundarya Meshram

5) Shubham Tonge

2) Samruddhi Moundekar

4) Nishant Joseph

6) Tanmay Kawthekar

*Under the guidance of*

**DR. M. S. BHAGAT**

**(ASSISTANT PROFESSOR)**



**DEPARTMENT OF CIVIL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)*

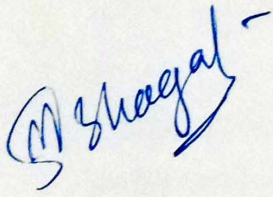
**NAGPUR – 441110**

**2022-2023**



## CERTIFICATE OF APPROVAL

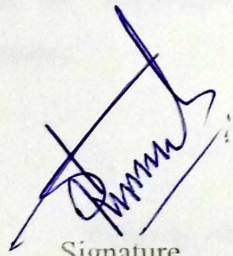
Certified that the project report entitled "**DESIGN AND DEVELOPMENT OF WATER CONSERVATION MODEL**" has been successfully completed by RITIKA THAKUR, SAMRUDDHI MOUNDEKAR, SOUNDARYA MESHAM, NISHANT JOSEPH, SHUBHAM TONGE, TANMAY KAWTHEKAR under the guidance of ASST. PROF. Dr. MADHURI S. BHAGAT in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**.



Signature

Prof. Dr. M. S. Bhagat

(Guide)



Signature

Prof. Dr. R. G. Surose

Dept. of Chemistry

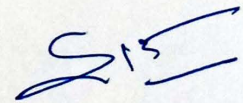
(Co-Guide)



Signature

Prof. Snehal Kamble

(Co-ordinator)

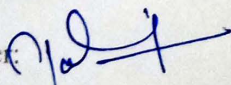


Signature

Dr. S. P. Raut

(HOD)

Signature of External Examiner:

Name:   
Dr. Pallavi Bisen

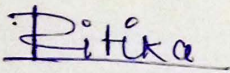
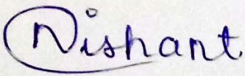
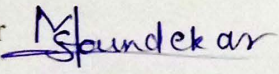
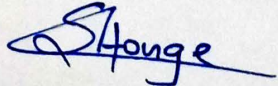
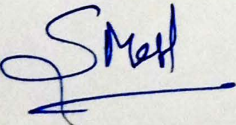
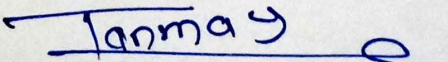
Date of Examination:



## DECLARATION

I / We certify that,

- 1) We have done the work contained in this project under the guidance of our supervisors.
- 2) The work has not been submitted to any other Institute for any degree or diploma.
- 3) We have followed the guidelines provided by the Institute in preparing the project report.
- 4) We have confirmed the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- 5) Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Name of the student	Signature of the Student	Name of the student	Signature of the Student
1 Ritika Thakur		4 Nishant Joseph	
2 Samruddhi Moundekar		5 Shubham Tonge	
3 Soundarya Meshram		6 Tanmay Kawthekar	

# DEVELOPMENT OF CONCRETE PANELS USING TEXTILE EFFLUENT SLUDGE

This project is submitted to  
**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rastrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of requirement  
for the award of the degree*

*Of*  
**Bachelor of Engineering in Civil Engineering**

*By*  
**Ashutosh Mishra**

**Nikhil Kate**

**Vikas Madke**

**Swapnil Dabre**

**Darshana Ingle**

*Under the guidance of*

**Dr. S.P. Raut**  
**Prof. Udaysingh Patil**



**DEPARTMENT OF CIVIL ENGINEERING**  
**Nagar Yuvak Shikshan Sanstha's**  
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**  
*(An Autonomous Institution Affiliated to Rastrasant Tukdoji Maharaj Nagpur University)*

**NAGPUR - 441 110**

**2022-23**

i



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF CONCRTE PANELS USING TEXTILE EFFLUENT SLUDGE" has been successfully completed by Ashutosh Mishra, Nikhil Kate, Vikas Madke, Swapnil Dabre, and Darshana Ingale under the guidance of **Dr. S. P. Raut** and **Prof. Udaysingh Patil** in the recognition to the partial fulfillment for the award of the degree of Bachelor Of Engineering, in **Yeshwantrao Chavan College Of Engineering (An Autonomous Institution Affilliated to Rastrasant Tukdoji Maharaj Nagpur University)**



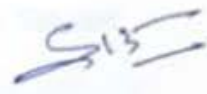
Dr. S. P. Raut  
(Guide)



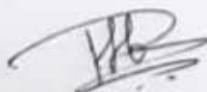
Prof. Udaysingh Patil  
(Co-Guide)



Prof. Ms. S.K. Kamble  
(Coordinator)



Dr. S. P. Raut  
(HoD)



Signature of External Examiner :

Name

: Prof. P. S. Bhandari

Date of Submission

:

||

# DEVELOPMENT OF SUSTAINABLE BRICKS USING TEXTILE EFFLUENT SLUDGE

*This project report is submitted to*  
**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in  
Civil Engineering**

*By*

**Atharva Kanchan Shahade  
Shardul Sandeep Naidu  
Siddhesh Jitendra Kulkarni**

*Under the guidance of*

**Guide: Dr. Sanjay P. Raut**

**Co-Guide: Prof. Udaysingh Patil**



**DEPARTMENT OF CIVIL ENGINEERING**

Nagar Yuwak Shikshan Sanstha

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441110**

**2022-23**



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF SUSTAINABLE BRICKS USING TEXTILE EFFLUENT SLUDGE" has been successfully completed by **ATHRAVA K. SHAHADE, SHARDUL S. NAIDU, SIDDHESH J. KULKARNI** under the guidance of **Dr. Sanjay P. Raut** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



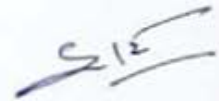
Dr. S.P. Raut  
(Guide)



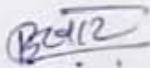
Prof. Uday Singh Patil  
(Co-Guide)



Prof. S. K. Kamble  
(Coordinator)



Dr. S.P. Raut  
(HoD)



Signature of External Examiner

Name: PROF. KAMLESH V. MADURWAR

Date of Examination: 05/06/2023

**TO STUDY THE FLEXURAL STRENGTH AND COMPRESSIVE  
STRENGTH OF BAMBOO FIBER, STEEL FIBER, LIMESTONE AND  
HYBRID COMPOSITES**

This project report is submitted to

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

In partial fulfillment of the requirement for the award of the degree

OF

**Bachelor of Engineering in CIVIL Engineering**

By

AYUSH KANEKAR  
SWARNIM GHADSE

SAMIN DAHIKAR

SANKET KHADSE  
SUDHANSHU WASADE

Under The Guidance Of

**Prof. V.N MENDHE**



**DEPARTMENT OF CIVIL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,  
NAGPUR441110**

*(An Autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "TO STUDY THE FLEXURAL STRENGTH AND COMPRESSIVE STRENGTH OF BAMBOO FIBER, STEEL FIBER, LIMESTONE AND HYBRID COMPOSITES" has been successfully completed by AYUSH KANEKAR, SAMIN DAHIKAR, SANKET KHADSE, SWARNIM GHADSE, SUDHANSHU WASADE under the guidance of Prof. V.N MENDHE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in CIVIL Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature

Prof. V.N MENDHE

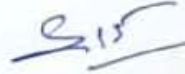
(Guide)



Signature

Mrs. SNEHAL KAMBLE

(Coordinator)

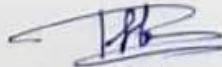


Signature

Dr. S.P RAUT

(HoD)

Signature of Examiner :



Examiner Name : Prof. P.S Binandaw

Date of Examination : 05/06/2023



**Performance Evaluation of Pomegranate Peel Bio  
Adsorbent for the Removal of Methylene Blue  
Dye from an Aqueous Solution**

*This project report is submitted to*  
**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement  
For the award of the degree*

*Of*

**Bachelor of Engineering in Civil Engineering**

*By*

Sanskriti Lohakare	Ankit Aghav
Sejal Wagh	Gaurav Surkar
Vrushali Somkuwar	Hardik Shendre

*Under the guidance of*

**Prof. Charuta Waghmare**



**DEPARTMENT OF CIVIL ENGINEERING**  
Nagar Yuwak Shikshan Santha's  
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

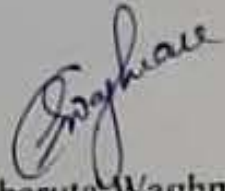
**NAGPUR – 441 110**

**2022-23**



CERTIFICATE OF APPROVAL

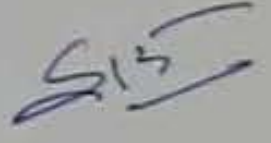
Certified that the project report entitled "**Performance Evaluation of Pomegranate Peel Bio Adsorbent for the Removal of Methylene Blue Dye from Aqueous Solution**" has been successfully completed by Sanskruti Lohakare, Sejal Wagh, Vrushali Somkuwar, Ankit Aghav, Gaurav Surkar, Hardik Shendre under the guidance of **Prof. Charuta Waghmare** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



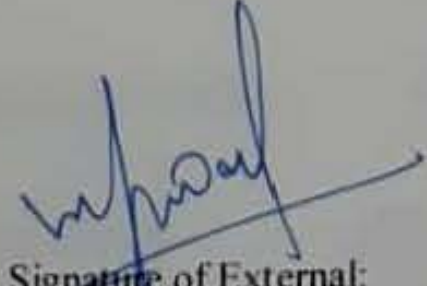
Prof. Charuta Waghmare  
(Project Guide)



Prof. Snehal Kamble  
(Co-Ordinator)



Dr. S. P. Raut  
(HoD)



Signature of External:

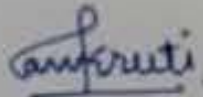

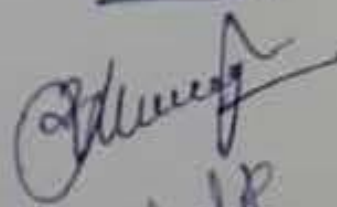
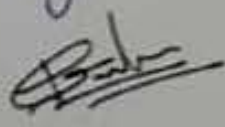

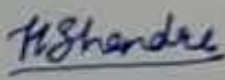
Examiner Name:

Date of Submission:

## DECLARATION

We certify that

- a. The work contained in this project has been done by us under the guidance of our supervisor.
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. we have followed the guidelines provided by the Institute in preparing the project report.
- d. we have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Name of Student	Signature Of Student	Name of Student	Signature Of Student
1. Sanskruti Lohakare		4. Ankit Aghav	
2. Sejal Wagh		5. Gaurav Surkar	
3. Vrushali Somkuwar		6. Hardik Shendre	

# EXPERIMENTAL STUDY ON COMPOSTING OF TEA WASTE AND ITS OPTIMIZATION BY TAGUCHI METHOD AND RESPONSE SURFACE METHODOLOGY

*This project report is submitted to*

Yeshwantrao Chavan College Of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

*In partial fulfillment of requirement*

*For the award of the degree*

*Of*

Bachelor of Engineering in Civil Engineering

*By*

Sohel Z. Khan	Mrunal P. Bobade
Sanket B. Sondawale	Ashwini A. Kakde
Chahul V. Danao	Rutuja A. Jivtode

*Under the guidance of*

**Mr. KHALID S. ANSARI (Guide)**

Dr. PRAJAKTA .U. WAGHE (Co-Guide)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuvak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)  
NAGPUR-441110

2022-23

## CERTIFICATE OF APPROVAL

Certified that the project report entitled “**EXPERIMENTAL STUDY ON COMPOSTING OF TEA WASTE AND IT’S OPTIMIZATION BY TAGUCHI METHOD AND RESPONSE SURFACE METHODOLOGY**” has been successfully completed by Sohel Z. Khan, Sanket B. Sondawale, Chahul V. Danao, Mrunal P. Bobade, Ashwini A. Kakde, Rutuja A. Jivtode under the guidance of **Mr. Khalid S. Ansari and Dr. Prajakta.U.Waghe** in the recognition to the partial fulfillment for the award of the degree of Bachelor Of Engineering in Civil Engineering, **Yeshwantrao Chavan College Of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**.



Signature

Mr. Khalid S. Ansari  
(Guide)



Signature

Dr. Prajakta U. Waghe  
(Co-Guide)



Signature

Prof. Snehal K. Kamble  
(Coordinator)



Signature

Dr. S. P. Raut  
(HOD)



Signature of External Examiner:

Name: Vikas Agarwal







Date of Examination: 05/06/2023



## DECLARATION

We clarify that,

1. We have done the work contained in this project under the guidance of our supervisors.
2. We have followed all the instructions given by our guide and mentors.
3. We have followed the guidelines provided by the institute in preparing the project report.
4. We have taken the permission from HOD and our project guide regarding the use of equipment in the laboratory.
5. Wherever we have used materials or data from the other sources, we have given due credit to them by giving their details in references

SR.NO	NAME OF STUDENTS	SIGNATURE OF STUDENTS
1	Sohel Z. Khan	
2	Chahul V. Danao	
3	Sanket B. Sondawale	
4	Mrunal P. Bobade	
5	Ashwini A. Kakade	
6	Rutuja A. Jiotode	

# **EFFECT OF VARIATIONS IN RAINFALL INTENSITY ON STABILITY OF SLOPES IN INDIA**

*This project is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated with Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*of*

**Bachelor of Engineering in Civil Engineering**

*By*

- |                         |                          |
|-------------------------|--------------------------|
| 1) Sejal Dhanvij (A-20) | 4) Kalash Dharmik (A-48) |
| 2) Arnav Kumar (A-36)   | 5) Saurabh Channe (A-65) |
| 3) Aryan Kumar (A-38)   | 6) Aman Mahant (B-135)   |

*Under the guidance of*

**Dr. J. M. Raut**

(Assistant Professor)



**DEPARTMENT OF CIVIL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

**NAGPUR - 441110**

**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "EFFECT OF VARIATIONS IN RAINFALL INTENSITY ON STABILITY OF SLOPE IN INDIA" has been successfully completed by SEJAL DHANVIJ, ARNAV KUMAR, ARYAN KUMAR, KALASH DHARMIK, SAURABH CHANNE, AMAN MAHANT under the guidance of DR. J.M RAUT in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).



Signature

Dr. J.M. Raut  
(Guide)



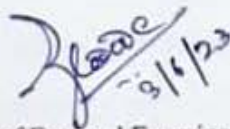
Signature

Prof. Snehal kamble  
(Co-Ordinator)



Signature

Dr. S.P. Raut  
(HOD)



Signature

Signature of External Examiner:

Name: DR. AMIT PADADE

Date of Examination: 03/06/2023

# INVESTIGATION OF DURABILITY OF RUBBERIZED CONCRETE

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement  
For the award of the degree  
Of*

**Bachelor of Engineering in Civil Engineering**

*By*

<b>Abhishek Rathod</b>	<b>Kapil Zode</b>
<b>Aniket Khobragade</b>	<b>Sagar Thakre</b>
<b>Harshal Uparwat</b>	<b>Prashik Vaidya</b>

*Under the guidance of*

**Prof. Dhiraj Agrawal**



**DEPARTMENT OF CIVIL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**  
*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR - 441 1110**

**2022-23**

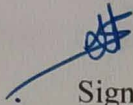


## CERTIFICATE OF APPROVAL

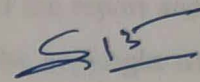
Certified that the project report entitled "INVESTIGATION OF DURABILITY FOR RUBBERIZED CONCRETE" has been successfully completed by ABHISHEK RATHOD, ANIKET KHOBRADE, HARSHAL UPARWAT, KAPIL ZODE, SAGAR THAKRE, PRASHIK VAIDYA under the guidance of PROF. DHIRAJ AGRAWAL in recognition to the partial fulfillment for the award of the degree of Master of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering( An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Sign



Sign

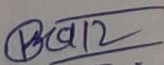


Sign

Prof. Dhiraj Agrawal  
(Guide)

Prof. Snehal Kamble  
(co-ordinator)

Dr. S. P. Raut  
(HoD)



Signature of External Examiner:

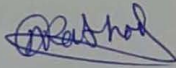
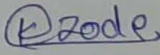
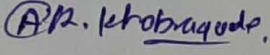
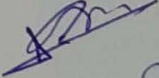
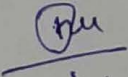
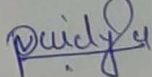
Name: PROF. KAMLESH V. MADURWAR

Date of Examination: 05/06/2023

## DECLARATION

We certify that

- a. The work contained in this project has been done by me under the guidance of my supervisor(s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. I have followed the guidelines provided by the Institute in preparing the project report.
- d. I have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever I have used materials (data, theoretical analysis, figures, and text) from other sources, I have given due credit to them by citing them in the text of the report and giving their details in the references. Further, I have taken permission from the copyright owners of the sources, whenever necessary

Name of Student	Signature	Name of Student	Signature
1. Abhishek Rathod		4. Kapil Zode	
2. Aniket Khobragade		5. Sagar Thakre	
3. Harshal Uparwat		6. Prashik Vaidya	

**Date:** - 08/05/2023

**Place:** - YCCE, Nagpur.

# Experimental Investigation on Use of Electronic Waste in High Strength Concrete

*This project report is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Bachelor of Engineering in Civil Engineering*

*By*

AVANTI PATRE

GAJAL VIRULKAR

SAMIKSHA DAHULE

ROSHAN KOLHE

SAMYAK CHANDANKHEDE

*Under the guidance of*

**Prof. P. K. Hinge**



**DEPARTMENT OF CIVIL ENGINEERING**  
**Nagar Yuwak Shikshan Santa's**  
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj**  
**Nagpur University, Nagpur)**

**NAGPUR – 441 110**  
**2022-23**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled **Experimental Investigation on Use of Electronic Waste in High Strength Concrete** has been successfully completed by **AVANTI PATRE, GAJAL VIRULKAR, SAMIKSHA DAHULE, ROSHAN KOLHE** and **SAMYAK CHANDANKHEDE** under the guidance of **P.K. HINGE** sir in recognition to the partial fulfilment for the award of the degree of Bachelor of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering (*An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University*)



Signature:

**Prof. P.K. Hinge**

Project (Guide)



Signature:

**Prof. Snehal Kamble**

Project(Coordinator)



Signature:

**Dr. Sanjay Raut**

(HOD) Civil Dept



Signature:

**Name of external examiner:**

**PROF. K.V. MADURWAR**

Date Of Examination: **05/06/23**



## DECLARATION

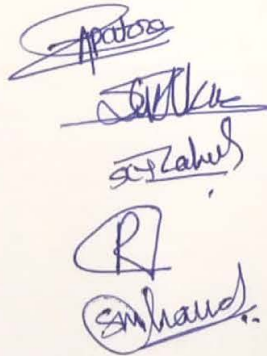
We certify that,

- a. The work contained in this project has been done by me under the guidance of my supervisor(s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Name of the student

Signature of the Student

1. AVANTI PATRE
2. GAJAL VIRULKAR
3. SAMIKSHA DAHULE
4. ROSHAN KOLHE
5. SAMYAK CHANDANKHEDE



The image shows five handwritten signatures in blue ink, corresponding to the student names listed to the left. The signatures are: 1. Avanti Patre, 2. Gajal Virulkar, 3. Samiksha Dahule, 4. Roshan Kolhe, and 5. Samyak Chandankhede.

# DEVELOPMENT OF SMALL SCALE MODEL HOUSE USING CUPOLA SLAG

*This project report is submitted to*

Yeshwantrao Chavan College of Engineering

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

Bachelor of Engineering in Civil Engineering

*By*

Soham Banshpal  
Rudraksh Khandare  
Yogesh Kasare

Prasad Bhogekar  
Samyak Pusate  
Viplav Ghurde

*Under the guidance of*

**Prof. Sangita S. Meshram**



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj  
Nagpur University, Nagpur)  
NAGPUR – 441 110

2022-23

## CERTIFICATE OF APPROVAL

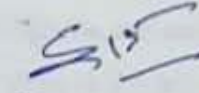
Certified that the project report entitled "DEVELOPMENT OF SMALL SCALE MODEL HOUSE USING CUPOLA SLAG" has been successfully completed by Soham Banshpal, Prasad Bhogekar, Rudraksh Khandare, Samyak Pusate, Yogesh Kasare, Viplav Ghurde under the guidance of Prof. Sangita S Meshram in recognition to the partial fulfillment for the award of the degree of bachelor of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering( An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

  
Signature

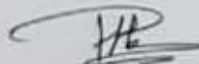
Prof.S.S.Meshram  
(Guide)

  
Signature

Ms.Snehal K Kamble  
(Coordinator)

  
Signature

Dr. Sanjay P Raut  
(HoD)

  
Signature of External Examiner:  
Name: Prof. P. S. Bhandari  
Date of Examination: 03/06/2023

# CASTING AND ANALYSIS OF HOLLOW FLY ASH BRICK

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in Civil Engineering**

*By*

**Anchal Donode**

**Omkar Potdar**

**Chinmay Chintawar**

**Parag Bhawe**

**Jay Bhore**

**Deepali Dhage**

*Under the guidance of*

**Dr. P. B. Pande**



**DEPARTMENT OF CIVIL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441 110**

**2022-23**



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "CASTING AND ANALYSIS OF HOLLOW FLY ASH BRICK" has been successfully completed by Anchal Donode, Chinmay Chintawar, Jay Bhore, Omkar Potdar, Parag Bhawe, Deepali Dhage under the guidance of Dr.P.B. Pande in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



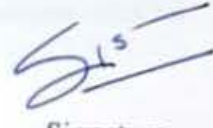
Signature

Dr. P.B. Pande  
(Guide)



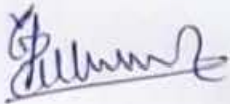
Signature

Prof. Snehal Kamble  
(Coordinator)



Signature

Dr. S.P. Raut  
(HoD)



Signature of External Examiner:

Name: M.D. Pidarkar

Date of Examination: 02/06/2023

# **CASTING AND ANALYSIS OF LIGHT WEIGHT BRICKS BY USING FOAM AGENT AND ADHESIVE CEMENT**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)

*In partial fulfillment of the requirement  
For the award of the degree*

*of*  
**Bachelor of Engineering in Civil Engineering**  
*By*

SHAHABAZ KHAN  
ACHAL SHIRKE  
SHAROOF KHAN

KASIFA PATEL  
VAISHNAVI TONGE  
AMER SHAIKH

Under the guidance of

**Dr. P.B.PANDE**



**DEPARTMENT OF CIVIL ENGINEERING**  
Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,  
Nagpur)

**NAGPUR - 441 110**  
**2022-2023**

**CERTIFICATE OF APPROVAL**

Certified that the project report entitled "CASTING AND ANALYSIS OF LIGHT WEIGHT BRICKS BY USING FOAM AGENT AND ADHESIVE CEMENT" has been successfully completed by Shahabaz Khan, Kasifa Patel, Achal Shirke, Vaishnavi Tonge, Sharoof Khan, Amer Shaikh, under the guidance of DR. P. B. PANDE in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**




Dr.P.B. Pande  
(Guide)



Prof. Snehal Kamble  
(Co-ordinator)



Dr. S.P. Raut  
(HOD)



Signature of External Examiner

Name *M. D. P. P. P. P.*

Date of Examination: *02. June 2023*

# AN EXPERIMENTAL INVESTIGATION ON ARTIFICIAL AGGREGATE CONCRETE.

*This project report is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement  
For the award of the degree  
Of*

**Bachelor of Engineering in Civil Engineering  
By**

**ABHINAV THAKARE**

**ABHISHEK SHELKE**

**AISHWARYA BOBDE**

**CHAITANYA KAKDE**

**NIKITA CHAWARE**

**SHRAVANI DANAV**

*Under the guidance of*

**Prof. ATUL S. KURZEKAR**



**DEPARTMENT OF CIVIL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's  
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)  
NAGPUR - 441 110  
2022-2023**





## CERTIFICATE OF APPROVAL

Certified that the project report entitled "AN EXPERIMENTAL INVESTIGATION ON ARTIFICIAL AGGREGATE CONCRETE" has been successfully completed by **Abhinav Thakare, Abhishek Shelke, Aishwarya Bobde, Chaitanya Kakde, Nikita Chaware, Shravani Danav** under the guidance of Mr. Atul S. Kurzekar in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, Yeshwantrao Chavan College of Engineering (*An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University*).

  
Signature  
Prof. Atul S. Kurzekar  
(Guide)

  
Signature  
Prof. Snehal Kamble  
(Co-ordinator)

  
Signature  
Dr. S. P. Raut  
(HOD)

  
Signature of External Examiner  
Name *M. D. P. D. P. D.*  
Date of Examination: *02/06/23*

## CERTIFICATE OF APPROVAL

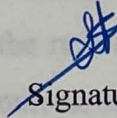
Certified that the project report entitled – “Comparative study of Rotating Biological Contactor for treatment of waste water using different media” has been successfully completed by Purva Naktode, Nadshri Ladke, Khushi Pawar, Nishant Badlu, Prajwal Jikate, Abhimanyu Bhanot, under the guidance of degree of Bachelor of Technology in Civil Engineering, Yeshwantrao Chavan College of Engineering. (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature

Prof. Pallavi.S.Chakole

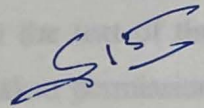
(Guide)



Signature

Prof. Snehal Kamble

(Coordinator)

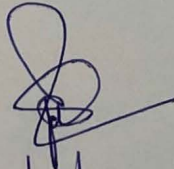


Signature

Dr. Sanjay.P.Raut

(HOD)

Signature of External Examiner



Name : Mohit Singh Katoch

Date of Examination : 5/06/23

## DECLARATION

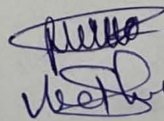
We certify that

- a. The work contained in this project has been done by me under the guidance of my supervisor(s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever We have used materials (data, theoretical analysis, figures, and text) from other sources, We have given due credit to them by citing them in the text of the report and giving their details in the references. Further, We have taken permission from the copyright owners of the sources, whenever necessary.

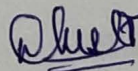
Name of Students

Signature

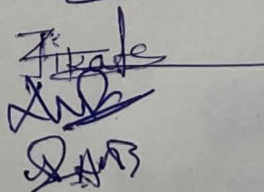
Ms.Purva Naktode



Ms.Nadshri Ladke



Ms.Khushi Pawar



Mr.Prajwal Jikate

Mr.Nishant Badlu

Mr.Abhimanyu Bhanot



# TREATMENT OF INDUSTRIAL DAIRY WASTE WATER USING ROTATING BIOLOGICAL CONTACTOR

*This project report is submitted to*

Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)

*in partial fulfillment of the requirement  
For the award of the degree*

*Of*

Bachelor of Engineering in Civil  
Engineering

By

Hitul Vaidya  
Bhushan Dhole  
Rushikesh Ghime

Pranay Tonge  
Shival Dakhale  
Shreyas Joshi

*Under the guidance of*

**Prof. Ms. Pallavi S. Chakole**



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur)

**NAGPUR-441110**

**2022-2023**



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "**TREATMENT OF INDUSTRIAL DAIRY WASTE WATER USING ROTATORY BIOLOGICAL CONTACTOR UNIT**" has been successfully completed By HITUL VAIDYA , PRANAY TONGE , SHIVAL DHAKLE , BHUSHAN DHOLE , RUSHIKESH GHIME , SHREYAS JOSHI under the guidance of Prof.Ms. PALLAVI S. CHAKOLE in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Civil Engineering, **Yeshwantrao Chavan College of Engineering** ( An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).



Signature

Prof. Pallavi .S. Chakole  
(Guide)



Signature

Prof. Snehal Kamble  
(Co-ordinator)



Signature

Dr .Sanjay .P. Raut  
(HOD)

Signature of External Examiner :



Name: *Mohit Singh Kattoli*

Date of Examination: : *05/06/2023*

# COMPARATIVE STUDY OF PROPERTIES OF SEWAGE SLUDGE FROM SEWAGE TREATMENT PLANT

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfilment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Engineering in Civil Engineering**

*By*

**Aman Kadbe**

**Amol Paunikar**

**Govind Sharma**

**Samyak Gayakwad**

**Saurabh Bonde**

**Saurabh Chawne**

*Under the guidance of*

**Ms. Snehal K. Kamble**



**DEPARTMENT OF CIVIL ENGINEERING**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University,  
Nagpur)*

**NAGPUR - 441 110**

**2022-23**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "Comparative study of properties of sewage sludge from sewage treatment plant" has been successfully completed by Aman Kadbe, Amol Paunikar, Govind Sharma, Samyak Gayakwad, Saurabh Bonde, Saurabh Chawne under the guidance of Ms. Snehal K. Kamble in recognition to the partial fulfilment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering** (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



Signature

Ms. Snehal K. Kamble

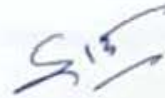
(Guide)



Signature

Ms. Snehal K. Kamble

(Coordinator)



Signature

Dr. Sanjay P. Raut

(HoD)

Signature of External Examiner

Name Prof. Mohitsingh Kotach

Date of Examination:



# DEVELOPMENT OF PERVIOUS CONCRETE USING INDUSTRIAL WASTE TO ENHANCE WATER QUALITY

This project is submitted to  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rastrasant Tukdoji Maharaj Nagpur University)

*In partial fulfillment of requirement  
For the award of the degree*

*Of*  
Bachelor of Engineering in Civil Engineering

*By*  
Dhanshree Sawarkar                      Siddhey Phatkar  
Sejal Bhojar                                Rohit Sahu  
Anjali Gabhane                             Rutuj Khawas

*Under the guidance of*

**Prof. Sanket G. Kalamkar**



DEPARTMENT OF CIVIL ENGINEERING  
Nagar Yuvak Shikshan Sanstha's  
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING  
(An Autonomous Institution Affiliated to Rastrasant Tukdoji Maharaj Nagpur University)


NAGPUR-441 110


Batch – 2022-23

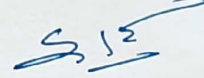


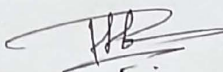
CERTIFICATE OF APPROVAL

Certified that the project report entitled "DEVELOPMENT OF PERVIOUS CONCRTE USING INDUSTRIAL WASTE TO ENHANCE WATER QUALITY" has been successfully completed by Dhanshree Sawarkar, Siddhey Phatkar, Sejal Bhoyar, Rohit Sahu, Anjali Gabhane & Rutuj khawas under the guidance of **Prof. Sanket G. Kalamkar** in the recognition to the partial fulfillment for the award of the degree of Bachelor Of Engineering, in **Yeshwantrao Chavan College Of Engineering (An Autonomous Institution Affilliated to Rastrasant Tukdoji Maharaj Nagpur University)**

  
Prof. Sanket G. Kalamkar  
(Guide)

  
Prof. Snehal Kamble  
(Co-ordinator)

  
Dr. S. P. Raut  
(HOD)

Signature of External Examiner :   
Name : Prof. P. S. Bhandarkar  
Date of Submission : 03/06/2023

## DECLARATION

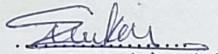
I/ we clarify that,

1. We have done the contained in this project under the guidance of our supervisors.
2. We have followed all the instructions given by our guide and mentors.
3. We have followed the guidelines provided by the institute in preparing the project report.
4. We have taken the permission from HOD and our project guide regarding the use of equipment in the laboratory.
5. Wherever we have used materials or data from the other sources, we have given due credit to them by giving their details in references.

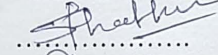
### **Name of student**

### **Signature of student**

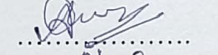
Dhanshree Sawarkar



Siddhey Phatkar



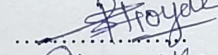
Anjali Gabhane



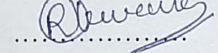
Rohit Sahu



Sejal Bhoyar



Rutuj Khawas



# Study of Self-compacting Concrete with Bagasse Ash, Metakaolin and Glass Fibre

This project report is submitted to  
Yeshwantrao Chavan College of Engineering, Nagpur  
(An Autonomous Institution Affiliated with Rashtrasant Tukadoji Maharaj Nagpur  
University)

In partial fulfillment of the requirement  
For the award of the degree  
of  
Bachelor of Engineering in Civil Engineering

By

- |                            |                            |
|----------------------------|----------------------------|
| 1) Abhishek Chavan (A-34)  | 4) Shreyas Goswami (B-176) |
| 2) Kartik Tarodekar (A-49) | 5) Paras Ramteke (B-162)   |
| 3) Mahesh Bhinge (B-151)   | 6) Vrushabh Mohod (C-283)  |

Under the guidance of

**Ms. Monali Wagh**

(Assistant Professor)



DEPARTMENT OF CIVIL ENGINEERING

Nagar Yuwak Shikshan Sanstha's

YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

NAGPUR – 441110 (2022-2023)



## CERTIFICATE OF APPROVAL

Certified that the project report entitled " **Study Of Self-compacting Concrete With Bagasse Ash, Metakaolin and Glass Fibre** " has been successfully completed by **Abhishek Chavan , Kartik Tarodekar , Mahesh Bhinge , Shreyas Goswami , Paras Ramteke & Vrushabh Mohod** under the guidance of Ms. Monali Wagh Mam in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in Civil Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University).**



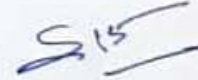
Professor Monali Wagh

(Guide)



Prof. Snehal Kamble

(Co-ordinator)



Dr. S.P.Raut

(HOD)



Signature of External Examiner:

Name: Prof. P. S. Bhandari

Date of Examination - 5-06-2023



# Streetlight Conservation Model and Line Following Car

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement*

*for the award of the degree*

*of*

**Bachelor of Engineering in Electronics Engineering**

*By*

**Atharva Kulkarni**

**Amisha Kale**

**Madhav Tejpal**

**Sakshi Nagdive**

*Under the guidance of*

**Dr. Prasanna Palsodkar**



**DEPARTMENT OF ELECTRONICS ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441 110**

**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled “**Streetlight Conservation Model and Line Following Car**” has been successfully completed by **Atharva Kulkarni, Amisha Kale, Madhav Tejpal, and Sakshi Nagdive** under the guidance of **Dr. Prasanna Palsodkar** in recognition to the partial fulfillment for the award of the degree of B.E. Electronics Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)**, Nagpur during session 2022-23



**Dr. Prasanna Palsodkar**

(Guide)



**Dr. P.P. Palsodkar/ Dr. U.S. Ghodeswar**

(Project Co-coordinators)



**Dr. R. D. Thakare**

(HOD, EE Dept.)



Signature of External Examiner:

Name: **Dr. P. R. Selpkar**

Date of Examination: **09/06/23**

# **FIRE EXTINGUISHER DRONE**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement  
for the award of the degree  
of*

**Bachelor of Engineering in Electronics Engineering**

*By*

*Bhushan Sable*

*Shreyas Tarudkar*

*Ankit Nagdeote*

*Tarkeshwar Satdeve*

*Harshada Thakare*

*Under the guidance of*

**Dr. Tejaswini G. Panse**



**DEPARTMENT OF ELECTRONICS ENGINEERING**

**Nagar Yuvak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)**

**NAGPUR – 441110**

**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled “**FIRE EXTINGUISHER DRONE**” has been successfully completed by **BHUSHAN SABLE, SHREYAS TARUDKAR, ANKIT NAGDEOTE, TARKESHWAR SATDEVE** and **HARSHADA THAKARE** under the guidance of **Dr. TEJASWINI G. PANSE** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in **Electronics Engineering**, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)** during 2022-2023.



Signature

**Dr. Tejaswini G. Panse**  
(Guide)

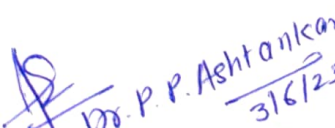


Signature

**Dr. Prachi P. Palsodkar**  
(Coordinator)



Signature  
**Dr. R. D. Thakare**  
(HoD ,EE)



Signature of External Examiner:

Name:

Date of Examination:



# Data Transmission using LiFi

CERTIFICATE OF APPROVAL

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)*

**Bachelor of Engineering in Electronics Engineering**

*by*

**Gauri Dambhare**

**Riya Singh**

**Tushar Waghmare**

**Ajay Khot**

*Under the guidance of*

**Dr. Yashika Gaidhani**



**DEPARTMENT OF ELECTRONICS ENGINEERING**

Nagar YuwakShikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441 110**

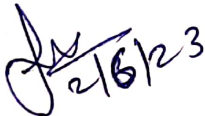
**2022-23**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "Data Transmission using LiFi" has been successfully completed by **Gauri Dambhare, Riya Singh, Tushar Waghmare, Ajay Khot** under the guidance of **Dr.Yashika Gaidhani** of in recognition to the partial fulfillment for the award of the degree of B.E. Electronics Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaja Nagpur University)**, Nagpur during session 2022-23



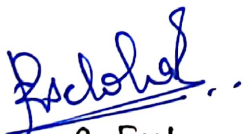
**Dr.Yashika Gaidhani**  
(ProjectGuide)



**Dr. P.P.Palsodkar**  
(Project Co-coordinators)



**Dr. R. D. Thakare**  
(HOD, EE Dept.)



Signature of External Examiner

Name : **Dr. P. R. Sebkar**

Date of Examination : **02/06/23**

# **ZigBee Based Controlling and Monitoring System**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering, Nagpur**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement for the award of the degree Of*

**Bachelor of Engineering in Electronics Engineering**

*By*

***Shruti Joshi***

***Shrutika Paunikar***

***Mayank Raut***

***Dhiraj Dave***

*Under the guidance of*

***Prof. K.G. Pande***



**DEPARTMENT OF ELECTRONICS ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)**

**NAGPUR – 441 110**

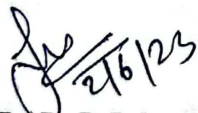
**2022-2023**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled “**Zigbee Based Controlling and Monitoring System**” has been successfully completed by **Shruti Joshi, Shrutika Paunikar, Mayank Raut and Dhiraj Dave** under the guidance of **Prof. K.G. Pande** in recognition to the partial fulfilment for the award of the degree of Bachelor in Electronics Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)**, Nagpur.



**Prof. K. G. Pande**  
(Project Guide)



**Dr. P. P. Palsodkar**  
(Project Coordinator)



**Dr. R. D. Thakare**  
(HOD, EE Dept.)



Signature of External Examiner

Name: (R Pethe)

Date of Examination:



# WI-FI CONTROLLED SURVEILLANCE ROBOT

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant*

*Tukdoji Maharaj Nagpur University)*

In partial fulfillment of the requirement

for the award of the degree

*of*

**Bachelor of Engineering in Electronics Engineering**

*By*

**Yash Parate**

**Runal Yerpude**

**Mohit Chandekar**

**Aman Nankani**

**Ankita Dongre**

*Under the guidance of*

**Dr. Ankita Tijare**



**DEPARTMENT OF ELECTRONICS ENGINEERING**

**Nagar Yuvak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur*

*University, Nagpur)*

**NAGPUR – 441 110**

**2022-2023**

Page 138 of 165



## CERTIFICATE OF APPROVAL

Certified that the project report entitled "WIFI CONTROLLED SURVEILLANCE ROBOT" has been successfully completed by YASH PARATE, RUNAL YERPUDE, MOHIT CHANDEKAR, AMAN NANKANI, and ANKITA DONGRE under the guidance of **Dr. Ankita Tijare** in recognition to the partial fulfillment for the award of the degree of Bachelor of Engineering in **Electronics Engineering**, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).



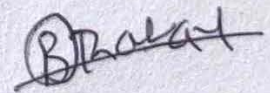
Signature

**Dr. A. D. Tijare**  
(Guide)



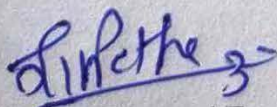
Signature

**Dr. Prachi P. Palsodkar**  
(Coordinator)



Signature

**Dr. R. D. Thakare**  
(HoD, EE)



Signature of External Examiner:

Name:

Date of Examination:



# IOT Based Monitoring of Fruit Freshness Using Arduino Nano

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University)*

*In partial fulfillment of the requirement  
for the award of the degree*

*of*

**Bachelor of Engineering in Electronics Engineering**

*By*

**Soham Katare  
Shreyas Suryawanshi  
Dip Paliwal  
Hitesh Meshram  
Rushabh Humane**

*Under the guidance of  
Guide*

**Prof Dr. R.D. Thakare**

**(HoD Electronics Department YCCE)**

**Co-Guide**

**Prof Dr. A. R. Maske**

**(HoD Govt. Agriculture College, Nagpur)**



**DEPARTMENT OF ELECTRONICS ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

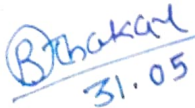
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,  
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)**

**NAGPUR – 441 110**

**2022-23**

## CERTIFICATE OF APPROVAL

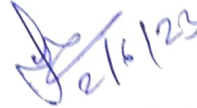
Certified that the project report entitled "IOT based Monitoring of Fruit Freshness using Arduino Nano" has been successfully completed by **Soham Katare, Shreyas Suryawanshi, Dip Paliwal, Hitesh Meshram, Rushabh Humane** under the guidance of **Dr. R.D. Thakare** and **Dr. A.R.Maske** of in recognition to the partial fulfillment for the award of the degree of B.E. Electronics Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)**, Nagpur during session 2022-23.

  
31.05.2023

**Prof Dr. R.D. Thakare**

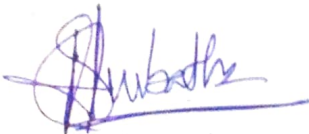
(Guide)

(Head of Department,  
Electronics Department)

  
2/6/23

**Dr.P.P.Palsodkar/Dr.U.S.Ghodeswar**

(Project Coordinators)



(External Examiner)

Name: **Dr. N.S. Ambath**

Date: **02/06/23**



**Dr. A. R. Maske**

(Co-Guide)

**Head**

Agril Engineering Section  
College of Agriculture, Nagpur





Nagar Yuwak Shikshan Sanstha's  
**Yeshwantrao Chavan College of Engineering**  
(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

(Accredited 'A' Grade by NAAC)  
Hingna Road, Wanadongri, Nagpur - 441 110

**DEPARTMENT OF MECHANICAL ENGINEERING (Project: 2022-23)**

**NOTE**

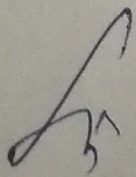
DATE:12-07-2024

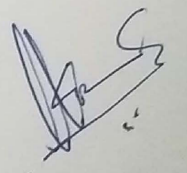
**SUBJECT:** Sanction of Expenditure regarding UG project for session 2023-24.

The following is the Expenditure incurred for completion of UG project for the session 2023-24.

SR.	PROJECT GUIDE	TITLE OF THE PROJECTS	TOTAL BILL AMOUNT
1	Prof. V. M. Korde	Investigation of Drying curve of pearl millet, sorghum & green peas using fluidized bed dryer	10176
2	Prof. R. V. Adakane	Design of fabrication of automatic Cercals Weighing & Packaging Machine.	41475.00
3	Prof. R. V. Adakane	Automated Comnod Cleaning System	16026.00
		<b>Total</b>	<b>67677.00</b>

FOR NA  
GOURNAD  
02-08  
AL

  
(Dr. J. P. Giri)  
HOD ME

  
(V. M. KORDE)  
Co-Ordinator

**INVESTIGATION OF DRYING CURVE OF PEARL  
MILLET, SORGHUM, GREEN PEAS BY USING  
FLUIDIZED BED DRYER**

*This major project report is submitted to*

*Yeshwantrao Chavan College of Engineering*

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji*

*Maharaj Nagpur University)*

*In partial fulfillment of the requirement for the award of degree*

*Of*

*Bachelor of Technology in Mechanical Engineering*

*By*

**Vaibhav Tandulkar**

**Priyadarshan Munjewar**

**Shraddha Mishra**

*Under the guidance of*

**Prof. VIVEK KORDE**



**DEPARTMENT OF MECHANICAL ENGINEERING**

*Nagar Yuwak Shikshan Sanstha's*

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur*

*University, Nagpur)*

**NAGPUR – 441 110**

**2023-24**



# INVESTIGATION OF DRYING CURVE OF PEARL MILLET, SORGHUM, GREEN PEAS BY USING FLUIDIZED BED DRYER

*Submitted by*

**Vaibhav Tandulkar**

**Priyadarshan Munjewar**

**Shraddha Mishra**

Under the guidance of

**Prof. VIVEK KORDE**



**DEPARTMENT OF MECHANICAL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's  
YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)  
NAGPUR – 441 110**

**2023-24**

Nagar Yuwak Shikshan Sanstha's  
**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)  
**NAGPUR – 441 110**

2023-24



**DEPARTMENT OF MECHANICAL ENGINEERING**

**CERTIFICATE OF APPROVAL**

Certified that the Major-Project report entitled  
**INVESTIGATION OF DRYING CURVE OF PEARL MILLET, SORGHUM,  
GREEN PEAS BY USING FLUIDIZED BED DRYER**  
has been successfully completed by

S. No.	Roll No.	Registration No.	Name of Student
1	53	21030025	Priyadarshan Munjewar
2	163	21030081	Vaibhav Tandulkar
3	106	21030046	Shraddha Miishra

under the guidance of


***Prof. VIVEK KORDE***


in recognition to the partial fulfillment for the award of the degree of

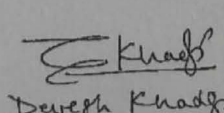
**Bachelor of Technology in Mechanical Engineering,**

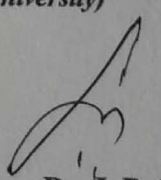
**Yeshwantrao Chavan College of Engineering**

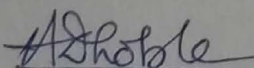
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

  
**Prof. V. M. KORDE**  
(Guide & Coordinator)

  
**Prof. N.J. Giradkar**  
(Co-Guide)

  
**ER. DEVESH KHADGI**  
(Industrial Co-Guide)

  
**Dr. J. P. GIRI**  
(HOD, ME Dept.)

  
Name & Signature of External Examiner:

Date of Examination: 22/5/24



**“DESIGN AND FABRICATION OF AUTOMATIC  
CEREALS WEIGHING AND PACKAGING MACHINE”**

*Submitted By*

**Akshay Patne**

**Ashish Jivtode**

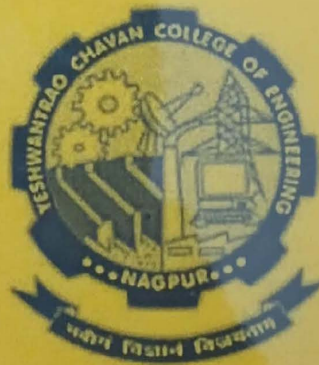
**Himanshu Gundawar**

**Swayamdeep Bhange**

*Under the guidance of*

**Prof. Rakesh Adakane**

**Er. Rushabh Bokde**



**DEPARTMENT OF MECHANICAL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING**

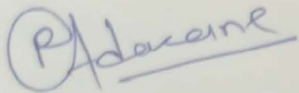
**(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur  
University, Nagpur)**

**NAGPUR – 441110**

**2023-24**

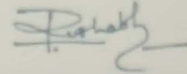
## CERTIFICATE OF APPROVAL

Certified that the project report entitled "Design and Fabrication of Automatic Weighing and Packaging Machine" has been successfully completed by Akshay Patne, Ashish Jivtode, Himanshu Gundawar, Swayamdeep Bhange under the guidance of **Prof. Rakesh Adakane** in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Mechanical Engineering, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**.



*Prof. Rakesh Adakane*

*(Guide)*



*Er. Rushabh Bokde*

*GET – Design Engineer*

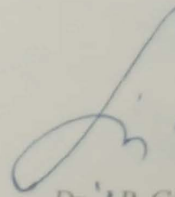
*Carraro Technology*

*(Co-guide)*



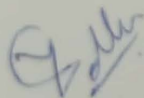
*Prof. V.M. Korde*

*(Project Co-ordinator)*



*Dr. J.P. Giri*

*(HOD, ME Department)*



Signature of External Examiner

Name:

Date:

## DECLARATION

I / we certify that

- a. The work contained in this project has been done by me under the guidance of my supervisor(s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, have taken permission from the copyright owners of the sources, whenever necessary.

Name of Student

Signature of Student

1. Akshay Patne

*Patne*

2. Ashish Jivtode

*Ajivtode*

3. Himanshu Gundawar

*Gundawar*

4. Swayamdeep Bhange

*S Bhange*



# DESIGN AND FABRICATION OF AUTOMATED COMMODE CLEANING MACHINE

*Submitted by*

**Abhishek Dharme**

**Ankit Kumar**

**Suvarsh Rajankar**

**Utkarsh Patil**

*Under the guidance of*

**Prof. Rakesh Adakane**

And

**Er. Rushabh Bokde**



**DEPARTMENT OF MECHANICAL ENGINEERING**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

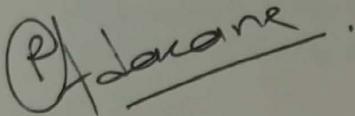
**NAGPUR – 441 110**

**2023-24**



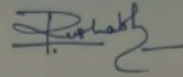
## CERTIFICATE OF APPROVAL

Certified that the project report entitled "Design and Fabrication of Automated Commode Cleaning Machine" has been successfully completed by Abhishek Dharme, Ankit Kumar, Suvarsh Rajankar and Utkarsh Patil under the guidance of Prof. Rakesh Adakane and GET- Design Engineer Rushabh Bokde in recognition to the partial fulfillment for the award of the degree of Bachelor in Mechanical Engineering, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University), Nagpur.



**PROF. RAKESH ADAKANE**

(Project Guide)



**Er. RUSHABH BOKDE**

GET – Design Engineer

Carraro Technologies

(Project Co-guide)



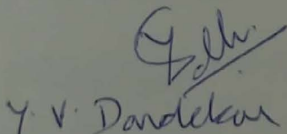
**PROF. V. M. KORDE**

(Coordinator)



**Dr. J. P. GIRI**

(HOD, ME Dept.)



Name & Signature of External Examiner :

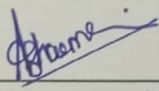
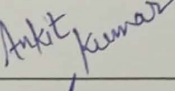
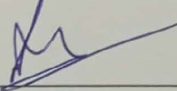

Date : 22/05/24

## DECLARATION

We certify that

- a. The work in this project has been done by us under the guidance of my supervisor(s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. We have followed the guidelines provided by the Institute in preparing the project report.
- d. We have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
- e. Whenever we have used materials (data, theoretical analysis, figures, and text) from other sources, we have given due credit to them by citing them in the text of the report and giving their details in the references. Further, we have taken permission from the copyright owners of the sources, whenever necessary.

Signature of the Students

Name of Student	Signature of the Student
Abhishek Dharme	
Ankit Kumar	
Suvarsh Rajankar	
Utkarsh Patil	

# Classification of Lung Diseases from CXR Images Using Transfer Learning

*This project report is submitted to*  
Yeshwantrao Chavan College of Engineering  
(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

*In partial fulfillment of the requirement*  
*For the award of the degree*  
*Of*

**Bachelor of Technology in Computer Technology**

*By*

<b>Badal Wanjari</b>	<b>Enrolment No: 20011045</b>
<b>Sanjana Verma</b>	<b>Enrolment No: 20010795</b>
<b>Arya Deshmukh</b>	<b>Enrolment No: 20010704</b>
<b>Somesh Mallewar</b>	<b>Enrolment No: 20011071</b>

*Under the guidance of*

**DR. RAKHI D. WAJGI**



**DEPARTMENT OF COMPUTER TECHNOLOGY**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

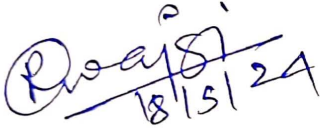
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

It is certified that the project report entitled “Classification of Lung Diseases from CXR Images Using Transfer Learning” has been successfully completed by **Badal Wanjari, Sanjana Verma, Arya Deshmukh** and **Somesh Mallewar** under the guidance of **Dr Rakhi D. Wajgi** in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Computer Technology, Yeshwantrao Chavan College of Engineering, Nagpur (An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University).



Dr. Rakhi Wajgi  
(Guide)



Prof. Smita Kapse  
(Coordinator)



Dr. Rakhi Wajgi  
(HoD)



Signature of External Examiner

Name: **V.V. Deshpande**

Date of Examination:



# MediSync Guardian: An IoT-Based Smart Medicine Box to Provide Smart Healthcare Services

*This project report is submitted to*  
**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement  
for the award of the degree*

*Of*

**Bachelor of Technology in Computer Technology**

*By*

**Gunjan Balpande (09)**  
**Shravani Kale (25)**  
**Manthan Jadhav (48)**  
**Sahil Lawankar (63)**  
**Vikrant Jaunjale (73)**

*Under the guidance of*

Prof. Smita R Kapse



**DEPARTMENT OF COMPUTER TECHNOLOGY**

Nagar Yuwak Shikshan Sanstha's

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj University Nagpur)*  
**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled “**MediSync Guardian: An IoT-Based Smart Medicine Box to Provide Smart Healthcare Services**” has been successfully completed by **Gunjan Balpande, Shravani Kale, Manthan Jadhav, Sahil Lawankar, Vikrant Jaunjale** under the guidance of **Prof. S. R. Kapse** in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Computer Technology, **Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)**



Signature  
18/05/2024

Prof. S. R. Kapse  
(Guide)



Signature

Prof. S. R. Kapse  
(Co-ordinator)



Signature  
18/5/24

Dr. R. D. Wajgi  
(HoD)



Signature of External  
Examiner:

Name: **v. v. deshpande**

Date of Examination: **18/5/24**

# **“Adaptive Machine Learning(ML) Model for Driver Drowsiness Detection using Developed ML Model”**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement for the award of the degree*

*Of*

**Bachelor of Technology in**

**Computer Technology**

*By*

**Kshitij Mehatkar**

**Aryan Baraskar**

**Tanmay Zerbade**

**Atharva Kawale**

*Under the guidance of*

**Prof. Roshan S. Bhanuse**



**DEPARTMENT OF Computer Technology**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

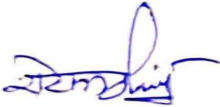
*(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)*

**NAGPUR – 441 110**

**2023-24**

## CERTIFICATE OF APPROVAL

Certified that the project report entitled "ADAPTIVE MACHINE LEARNING (ML) MODEL FOR DRIVER DROWSINESS DETECTION USING DEVELOPED ML MODEL" has been successfully completed by ATHARVA KAWALE, KSHITIJ MEHATKAR, ARYAN BARASKAR, TANMAY ZERBADE under the guidance of **PROF. ROSHAN S. BHANUSE** in recognition to the partial fulfillment for the award of the degree of Bachelor of Technology in Computer Technology, Yeshwantrao Chavan College of Engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)



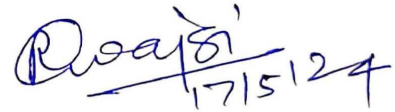
Prof. Roshan S. Bhanuse

Guide



Prof. Smita Kapse

Coordinator



Dr. Rakhi Wajgi

HOD

Signature of External Examiner:

Name: **DR. P.N. FOLE**

Date of Examination:

**17/05/2024**



**Multi-Disease Prediction using Ensemble Techniques with  
Deep Learning Models**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement  
for the award of the degree*

*Of*

**Bachelor of Technology in Information Technology**

*By*

**Mr. Ayush Wankhede (42)**

**Mr. Devansh Mahant (47)**

**Mr. Aryan Waranashiwar (37)**

**Mr. Parth Kakde (66)**

**Mr. Saurabh Chopade (158)**

**Ms. Pranjal Raut (18)**

*Under the guidance of*

**Prof. Mr. Abhay Yeole**

**Dr. Anushree Aserkar**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

*(An autonomous institution affiliated to Rashtrasant Tikdoji Maharaj University Nagpur)*

**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

Certified that the Major Project entitled "MULTI-DISEASE PREDICTION USING ENSEMBLE TECHNIQUES WITH DEEP LEARNING MODELS" has been successfully completed by MR. AYUSH WANKHEDE , MR. DEVANSH MAHANT , MR. ARYAN WARANASHIWAR , MR. PARTH KAKDE , MR. SAURABH CHOPADE , MS. PRANJAL RAUT under the guidance of **Prof. Mr. Abhay Yeole** in recognition of the fulfillment for the award of the degree of Bachelors of Technology in Information Technology, **Yeshwantrao Chavan College of engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj University)** Nagpur.



**Prof. Mr. Abhay Yeole**  
Guide

Assistant Professor

Department of Information Technology  
YCCE, NAGPUR



**Dr. Anushree Aserkar**

Co-Guide

Assistant Professor  
Department of Mathematics  
YCCE, NAGPUR



**Prof. Priyanka Jaiswal**

Project co-ordinator

Department of Information Technology  
YCCE, NAGPUR



**Dr. R. C. Dharmik**

Head Of Department

Department of Information Technology  
YCCE, NAGPUR

Signature of External Examiner  
Name:



Date of Examination

# SENTIMENT ANALYSIS

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement  
For the award of the degree*

*Of*

**Bachelor of Technology in Information Technology**

*By*

**Janhvi Ambade (09)**  
**Pragati Likhari (17)**  
**Anurag Zawar (36)**  
**Himanshu Saurkar (57)**  
**Pawan Dawake (67)**  
**Swapnil Patil (163)**

*Under the guidance of*

**Prof. M. K. Hadap**



**DEPARTMENT OF INFORMATION TECHNOLOGY**  
**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**  
*(An autonomous institution affiliated to Rashtrasant Tukdoji Maharaj University Nagpur)*  
**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

Certified that the Major Project entitled "SENTIMENT ANALYSIS" has been successfully completed by JANHVI AMBADE, PRAGATI LIKHAR, ANURAG ZAWAR, PAWAN DAWAKE, HIMANSHU SAURKAR, SWAPNIL PATIL under the guidance of **Prof. M. K. Hadap** in recognition of the fulfillment for the award of the degree of Bachelors of Technology in Information Technology, **Yeshwantrao Chavan College of engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj University)** Nagpur.

  
**Prof. M. K. Hadap**

Guide

Associate Professor

Department of Information Technology  
YCCE, NAGPUR

  
**Prof. Priyanka Jaiswal**


Project Co-ordinator

Department of Information Technology  
YCCE, NAGPUR

  
**Dr. R. C. Dharmik**

Head Of Department

Department of Information Technology  
YCCE, NAGPUR

Signature of External Examiner 

Name:

Date of Examination:



# **Mastering the Art of Note-Taking : Convert YouTube Lectures into Comprehensive Notes with AI's Assistance and Audio-to-Transcript Integration**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**

*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfillment of the requirement  
For the award of the degree*

*Of*

**Bachelor of Technology in Information Technology**

*By*

**Tanushree Deshmukh (23)**

**Aasim Shaikh (31)**

**Budharam Kumbhre (44)**

**Himanshu Samrit (56)**

**Musab Shaikh (61)**

**Vedang Patil (79)**

*Under the guidance of*

**Prof. Chandrayani N. Rokde**

**Ms. Nidhi Patwardhan**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

**(An autonomous institution affiliated to Rashtrasant Tikdoji Maharaj University Nagpur)**

**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

Certified that the Major Project entitled “**Mastering the Art of Note-Taking : Convert YouTube Lectures into Comprehensive Notes with AI’s Assistance and Audio-to-Transcript Integration**” has been successfully completed by TANUSHREE DESHMUKH, AASIM SHAIKH, BUDHARAM KUMBHRE, HIMANSHU SAMRIT, MUSAB SHAIKH, VEDANG PATIL under the guidance of **Prof. Chandrayani N. Rokde And Co-Guide Nidhi Patwardhan** in recognition of the fulfillment for the award of the degree of Bachelors of Technology in Information Technology, **Yeshwantrao Chavan College of engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj University) Nagpur.**

**Prof. Chandrayani N. Rokde**  
Guide  
Associate Professor  
Department of Information Technology  
YCCE, NAGPUR

**Nidhi Patwardhan**  
Co-Guide  
Taxonomy Analyst,  
Data Manager eBay  
San Francisco Bay Area

**Prof. Priyanka Jaiswal**  
Project co-ordinator  
Department of Information Technology  
YCCE, NAGPUR

**Dr. R. C. Dharmik**  
Head Of Department  
Department of Information Technology  
YCCE, NAGPUR

Signature of External Examiner  
Name:  
Date of Examination

# **DISEASE PREDICTION USING MACHINE LEARNING**

*This project report is submitted to*

**Yeshwantrao Chavan College of Engineering**  
*(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University)*

*In partial fulfilment of the requirement*

*For the award of the degree*

*Of*

**Bachelor of Technology in Information Technology**

*By*

**Deepali Lanjewar (05)**

**Divita Meshram (06)**

**Amit Rathod (132)**

**Neha Khadse (14)**

**Harsh Sawal (50)**

*Under the guidance of*

**Dr. K. K. Bhoyar**

**Prof. Priti Matre**



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Nagar Yuwak Shikshan Sanstha's**

**YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING,**

**(An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj University, Nagpur)**

**NAGPUR – 441 110**

**2023-2024**

## CERTIFICATE OF APPROVAL

Certified that the Major Project entitled “**Disease Prediction Using Machine Learning**” has been successfully completed by Deepali Lanjewar, Divita Meshram, Neha Khadse, Harsh Sawal and Amit Rathod under the guidance of **Dr. K. K. Bhoyar** And Co-Guide **Prof. Priti Matre** in recognition of the fulfilment for the award of the degree of Bachelors of Technology in Information Technology, **Yeshwantrao Chavan College of engineering (An Autonomous Institution Affiliated to Rashtrasant Tukdoji Maharaj University)** Nagpur.



**Dr. K. K. Bhoyar**  
Guide  
Professor

Department of Information Technology  
YCCE, NAGPUR



**Prof. Priti Matre**  
Co-Guide  
Assistant Professor

Department of Information Technology  
YCCE, NAGPUR



**Prof. Priyanka Jaiswal**  
Project co-ordinator

Department of Information Technology  
YCCE, NAGPUR



**Dr. R. C. Dharmik**  
Head of Department

Department of Information Technology  
YCCE, NAGPUR

Signature of External Examiner

Name:

Date of Examination:





Nagar Yuwak Shikshan Sanstha's

# Yeshwantrao Chavan College of Engineering

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Hingna Road, Wanadongari, Nagpur-441110

NAAC Accredited with 'A++' Grade

Ph. : 07104- 295083, 295085

Website : www.ycce.edu , Email : principal@ycce.edu

## Declaration by the Head of the Institution

I hereby declare that the data, information and support documents attached herewith are genuine and correct to my knowledge.

Dr. U.P. Waghe

Principal

Principal

Yeshwantrao Chavan  
College of Engineering  
Wanadongri Hingna Road,  
NAGPUR-441110

