| न हि ज्ञानेन सदृशं पवित्रमिह विद्यते |

Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar



D.V.V.P. College of Engineering Ahmednagar Mechanical Engineering Dept. Details of Project Work (B.E Mech.) Academic Year 2023-24

Sr. No.	Name Of Guide	Group No	Roll No	Name of Student	Mobile No	Title of Project	Sponsored/Non sponsored	If Sponsored Name of INDUSTRY
			2	Bade Shantanu Ravindra	9403064282			
			11	Khan Arib Maruf	8459605960		Non sponsored	
			12	Madane Tanmay Shivaji	7620660920	Devlopment of magneteic	rion sponsored	
1	Prof. P.A. Narawde	G1	13	Mohite Vishal Kashinath	8275789004	suspension		
			3	Bakal Gaurav Sanjay	9403229122			
			5	Dangat Akshay Radhakisan	9022065159			
			20	Sonawane Premdas K	9579499058		Non sponsored	
				Pund Vishal S.		Automatic Breaking		
2	Prof. B.T. Tagad	G2	27	Yemul Vinayak Mallayya	9373131043	System		
			4	Bakal Narendra Rajendra	8007956371	Modelling &	Sponsored	
			22	Ugale Digvijay Balasaheb	7822819326	Simulation of Li-ion Battery		
	Prof. D.K.		32	Bhosale Omkar A	7385548346	pack under thermal runway		Noven Technology
3	Nanaware	G3	33	Dahatonde Gaurav S	9922762268	conditions		LLP, Kothrud, Pune
			8	Gaware Prajita Mohan	7720936181			
			25	Waghade Dipak Appasaheb	9422844245	IOT based Smart irrigation	Non sponsored	
4	Prof. A.D. kachare	G4	30	Lokhande Suyash	8669241963	system		



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



			34	Kokane Sairaj	7057044537			
			1	Aseri Shivam Nandkishor	9730428321	Design &		
			26	Waman Mayur Dilip	9552510065	Development of parallel &	Non sponsored	
			28	Yengupatala Sumit	9130230798	angular offset	rvon sponsored	
6	Prof. A.S. Aher	G6		Mache Yash R.	8485847660	coupling		
			21	Tungar Sanket Babasaheb	9370401903	Design &		
			24	Varade Prathamesh P	9373186626	Development smart solar	Non sponsored	
7	Prof. M.M. Bidve	G 7	9	Gugale Krishna Sambhaji	9359742437	grass cutter		
/	Prof. M.M. blave	G/	16	Shinde Aditya Ravindra	8308390417			
			10	Jawale Pratik Shrikant	9284265636			
				Mane Omkar Pravin		Structural	Non Sponsored	
			23	Updhye Prajwal Pravin	9130032065	analysis of layered	Non Sponsored	
8	Prof. K.M.Markad	G8		Sutar Prathmesh		composite		
			35	Ganesh Mule	7620743933	Analysis of		
				Shinde Abhishek Sunil	9850377010	optimization process	N7 1	
9	9			Thite Omkar Baliram	7517867243	parameter by	Non sponsored	
				Aniket Zine		using CNC Machine		
	Prof. D.B. Thange	G9		Patare Manisha		wiaciiiic		





Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Dr. Vithalrao Vikhe Patil Foundation's DR. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING, AHMEDNAGAR DEPARTMENTOFMECHANICALENGINEERING

NOTICE

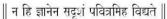
Project Stage I- 2023-24

Date Oslulza

All the guides of B.E. Mechanical projects are hereby informed that the Project Stage -I will be conducted on 9th Nov 2023. Guide should check following Points:

- 1. PPT Presentation.
- Project Diary.
- 3. Project Report duly signed by all authorities. before 09/11/2023.







Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



DR. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING, AHMEDNAGAR

DEPARTMENT OF MECHANICAL ENGINEERING

NOTICE

Project stage -I

All the students of B.E. Mechanical are hereby informed that the Project stage-I oral will be conducted on 9° November 2023. Follow the below instructions strictly.

- As per schedule all groups should be present at given time.
- 2. If any changes required inform priorly in application duly signed by guide, Project coordinator.
- 3. Students should carry 3 copies of project report signed by authorities.
- 4. Students should carry their completed project diary without fail.
- 5. All sponsored projects should get their industry approval documents, along with details of your industrial guides.
- 6. Presentation should be in the prescribed format.
 - a. Cover slide
 - b. Introduction
 - c. Problem statement
 - d. Objectives
 - e. Scope
 - f. Methodology
 - g. Literature Review
 - h. Summary of literature
 - i. Your own complete Design & its analysis or simulation work
 - j. Validation if required
 - k. Conclusion
 - I. References

Project Coordinators

1. Prof. D. B. Thange

2. Prof. B.T. Tagad

Prof .Dr. R. R. Navthar



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161





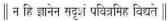
NOTICE

B.E. Mechanical

Students Project Work 2023-24

All the students should note the detail time-table for presentation of Stage I on 9th Nov 2023.

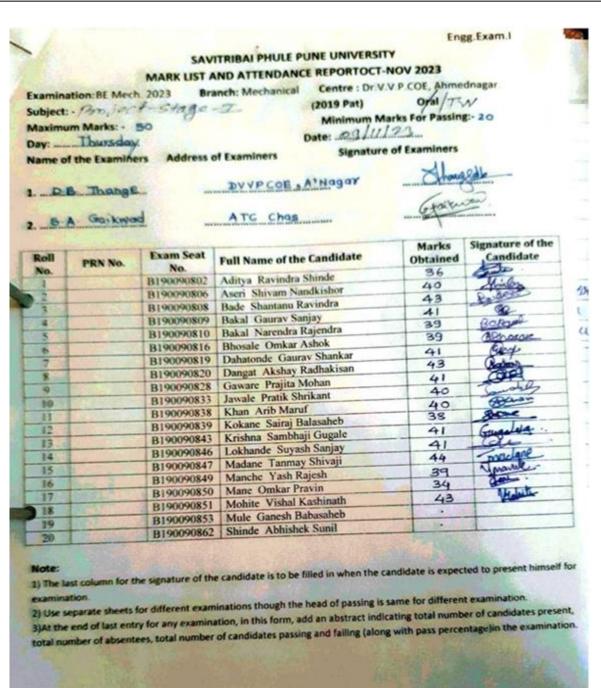
Sr.	Guide	Examiner	GroupNumbers	Time	
No				10:00 10:15 10:30 10:45 11:00 11:15	To
	Date:9th Nov 2023Day: Thursday	Venue:PhI	O Computer Lab		
1	Prof. P A Narwade	EXTERNAL	G-1	10:00	10:15
2	Prof. B T Tagad	EXAMINER	G-2	10:15	10:30
3	Prof. D K Nannaware		G-3	10:30	10:45
4	Prof. A D Kachare		G-4	10:45	11:00
5	Prof. R E Kalhapure		G-5	11:00	11:15
6	Prof. A S Aher		G-6	11:15	11:30
7	Prof. M M Bidwe		G-7	11:30	11:45
8	Prof. K M Markad	Venue:PhD EXTERNAL	G-8	11:45	12:00





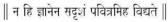
Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161





Prof. (Dr) R. R. Navthar

PRINCIPAL Dr. Vithairao Vitho Patil College of Engineering





Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Engg.Exam.I

SAVITRIBAI PHULE PUNE UNIVERSITY

MARK LIST AND ATTENDANCE REPORT OCT-NOV 2023

Subject: Project Stage - I

(2019 Pat)

Centre: Dr.V.V.P.COE, Ahmednagar. Oral/TW

Maximum Marks: - 50

Minimum Marks For Passing:- 20

Date: 09/11/23

Address of Examiners

Branch: Mechanical

Signature of Examiners

1 DB Thange

Examination: BE Mech. 2023

Day:Thursday Name of the Examiners

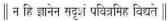
DVYP COE , A'Nagar

, SA Gaikwad

ATC chas.

Roll No.	PRN No.	Exam Seat No.	Full Name of the Candidate	Marks Obtained	Signature of the Candidate
21		B190090863	Sonawane Premdas Jayprakash	39	ages.
22		B190090865	Sutar Prathmesh Pandit	38	Autur
23		B190090866	Thite Omkar Baliram		The Control of the Co
24		B190090868	Tungar Sanket Babasaheb	40	Callets
25	Ti-No To	B190090870	Ugale Digvijay Balasaheb	41	- Um 1023-
26		B190090871	Varade Prathamesh Prabhakar	39	Qta.
27		B190090873	Waghade Dipak Appasaheb	41	Mahades A.
28		B190090876	Waman Mayur Dilip	39	Daimer
29		B190090877	Yemul Vinayak Mallayya	40	Var
30		B190090878	Yengupatala Sumit Dhananjay	39	Sur
31		B190090879	Zine Aniket Keshav	39	Closede
32	72140335M		PRAJWAL PRAVEN UPACHVE	35	STATE ALL
33	72190338H		Rund Kishal donjog	38	tolod.
34	7228 1740		Prosument Suni Ganthir		V.5.9 0000
35	722814022		Salvi Ashuh Avinasa	39	Netrake
36			Total Control of the		1
37					
38					
39					
40	THE RESERVE				

- 1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for
- 2) Use separate sheets for different examinations though the head of passing is same for different examination.
- 3)At the end of last entry for any examination, in this form, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing and failing (along with pass percentage)in the examination





Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Engg.Exam.I

SAVITRIBAI PHULE PUNE UNIVERSITY

MARK LIST AND ATTENDANCE REPORTOCT-NOV 2023

Examination: BE Mech. 2023 Branch: Mechanical

Centre: Dr.V.V.P.COE, Ahmednager

Subject: Provect Stage - I

(2019 Pat) Oral /TX

Maximum Marks: - 50 Day:Thuxsdax.

Minimum Marks For Passing:- 20 Date: 001/11/23...

Name of the Examiners

Address of Examiners

Signature of Examiners

1. D.B. Thange

DVVP COE, A' Nagar

2. S. A. Gaikwad

A.T.C chas

3	bane alb
Y	00
Cofe	ique -
-	

Roll No.	PRN No.	Exam Seat No.	Full Name of the Candidate	Marks Obtained	Signature of the Candidate
1	Carrie Carrie	B190090802	Aditya Ravindra Shinde	35	die .
2	2 7 May	B190090806	Aseri Shivam Nandkishor	39	Thilen
3		B190090808	Bade Shantanu Ravindra	41	Reidelle
4		B190090809	Bakal Gaurav Sanjay	39	GR
5		B190090810	Bakal Narendra Rajendra	38	BOUCH
6	and the same of th	B190090816	Bhosale Omkar Ashok	38	aphosne
7		B190090819	Dahatonde Gaurav Shankar	39	Cary.
8	1882	B190090820	Dangat Akshay Radhakisan	4-2	Asses -
9		B190090828	Gaware Prajita Mohan	39	20
10		B190090833	Jawale Pratik Shrikant	41	Tourde
11		B190090838	Khan Arib Maruf	41	Aknan
12		B190090839	Kokane Sairaj Balasaheb	39	Base
13		B190090843	Krishna Sambhaji Gugale	40	Gugales.
14		B190090846	Lokhande Suyash Sanjay	40	01
15		B190090847	Madane Tanmay Shivaji	43	machine_
16		B190090849	Manche Yash Rajesh	39	Margarete :3
17		B190090850	Mane Omkar Pravin	35	gave.
18		B190090851	Mohite Vishal Kashinath	42	Molute
19		B190090853	Mule Ganesh Babasaheb		
20	The Carlotte St	B190090862	Shinde Abhishek Sunil		

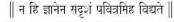
Note:

1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for

2) Use separate sheets for different examinations though the head of passing is same for different examination.

3)At the end of last entry for any examination, in this form, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing and failing (along with pass percentage)in the examination.

Scanned by Scanner Go





Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



SAVITRIBAI PHULE PUNE UNIVERSITY Engg.Exam.I MARK LIST AND ATTENDANCE REPORT OCT-NOV 2023

Examination: BE Mech. 2023

Branch: Mechanical

Centre: Dr.V.V.P.COE, Ahmednagar.

Subject: - Project stage -37 Maximum Marks: - 50

(2019 Pat)

Oral/TW Minimum Marks For Passing:- 20

Day:Thursday. Name of the Examiners

Date: 29/11/23 Address of Examiners

Signature of Examiners

1. D.B. Thange

DVVPCOE , A'Nagay

2. S.A. Gaikwad

A.T. C. Chas

Roll No.	PRN No.	Exam Seat No.	Full Name of the Candidate	Marks Obtained	Signature of the Candidate
21		B190090863	Sonawane Premdas Jayprakash	39	aug
22		B190090865	The state of the s	39	Thetar
23		B190090866	The state of the s		
24	District Co.	B190090868		39	Source
25		B190090870		39	Vanle D. D.
26	1923 6 7 7 7	B190090871	Varade Prathamesh Prabhakar	38	-00
27		B190090873		41	Idogradop A.
28		B190090876		39	Durmen
29	MINE TO Y	B190090877	Yemul Vinayak Mallayya	39	VIDA
30		B190090878	Yengupatala Sumit Dhananjay	39	Sulge.
31		B190090879		39	COAK
32	72140336M		PRAJUAL PRAUCU UPACHYE	35	Char
33	722812740	Marie Color	Prashort Swil garding fund wished donjog Salvi Ashish Avinosa	39	Tis gan bhip
34	72140338H	PERSONAL PROPERTY.	Rend kishal Bonjon	39	Trisal.
35	723814021		Salvi Ashish Aviron	38	-tapion
36	120.702				
37	BUALLAND OF			and the same of	
38					
39					
40					

- 1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for
- 2) Use separate sheets for different examinations though the head of passing is same for different examination.
- 3)At the end of last entry for any examination, in this form, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing and failing (along with pass percentage)in the examination



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



DEPARTMENT OF MECHANICAL ENGINEERING

NOTICE

B.E. Mechanical

Students Project Work in 2023-24

All the students should note the detail time-table for presentation of Review III on 10th Feb 2024.

Sr.	Guide	Examiner	GroupNumbers	Time	
No		4		From	To
	Date:10th Feb 2024	Day: Saturday	Venue:PhD Computer	Lab	
I	Prof. P.A Narawade	Prof B T Tagad	G-1	10:00	10:15
2	Prof B T Tagad	Prof. P.A Narawade	G-2	10:15	10:30
3	Prof D K Nannaware	Prof. A D Kachare	G-3	10:30	10:45
4	Prof. A D Kachare	Prof D K Nannaware	G-4	10:45	11:00
5	Prof R E Kalhapure	Prof A S Aher	G-5	11:00	11:15
6	Prof A S Aher	Prof R E Kalhapure	G-6	11:15	11:30
7	Prof M MBidwe	Prof K M Markad	G-7	11:30	11:45
8	Prof K M Markad	Prof M MBidwe	G-8	11:45	12:00
9.	Prof D B Thange	Prof. P.A Narawade	G-9	12:00	12:15

HOD (Mech.)



Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



DR. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING, AHMEDNAGAR DEPARTMENT OF MECHANICAL ENGINEERING NOTICE

Project stage -II Instructions for Project Report Writing

It is important that the procedures listed below be carefully followed by all the students of B.E. (Mechanical Engineering).

- Prepare Three Hard Bound Copies of your manuscript.
- Limit your Dissertation report to 80-120 pages (preferably)
- 3. The report shall be both side print hard bound. A hardbound report shall be made after examination and examiner and guide's expected correction, before that report must be loosely bound.
- 4. Plagiarism check is must, and certificate shall be attached in the report.
- A group activity shall be presented in report.
- Report copies shall be submitted in the department, one for university and one for supervisor.
- 7. For standardization of the project reports the following format shall be strictly followed.
- a. Page size: Trimmed A4
- b. Top Margin: 1.00 Inches
- c. Bottom Margin: 1.32 Inches
- d. Left Margin: 1.5 Inches
- e. Right Margin: 1.0 Inches
- f. Para Text: Times New Roman 12-point font
- g. Line Spacing: 1.15 Lines
- h. Page Numbers: Right aligned at footer. Font 12 point Times New Roman
- i. Headings: Times New Roman, 14 Points, Boldface 10.

Index of Report

- 1. Title Sheet
- 2. Certificate (Institution)
- 3. Certificate (Company, if sponsored by company)
- 4. Acknowledgement
- 5. Abstract of the Project
- 6. List of Figures
- 7. List of Photographs / Plates
- 8. List of Tables
- 9. Table of Contents
- 10. Introduction
- 11. Literature Survey / Theory
- 12. Design / Experimentation / Fabrication / Production / Actual work carried out for the same
- 13. Observation Results
- 14. Discussion on Result and Conclusion
- 15. Student and Guide details. (A common photograph with project)

1. Prof. D B Thange

H.O.D (Mech)



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



All the Project Groups should maintain the Project Diary/Notebook as per the University Syllabus & bring it during the presentation.

All the students should be in uniform at the time of presentations.

And be on time as per schedule

Project Coordinator

1. Prof. D B Thi

Dr. R.R. Navthar

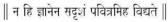
Dr. Vithalrao Vikhe Patil Foundation's DR. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING, AHMEDNAGAR DEPARTMENTOFMECHANICALENGINEERING

NOTICE

Project Stage II- 2023-24

All the guides of B.E. Mechanical projects are hereby informed that the Project Stage -II will be conducted on 27" May 2024. Guide should check following Points:

- PPT Presentation.
- Project Diary.
- 3. One page Summary
- 4. Project Report duly signed by all authorities.





Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Engg. Exam. I

SAVITRIBAL PHULE PUNE UNIVERSITY MARK LIST AND ATTENDANCE REPORT

APRIL/MAY-2024

Branch: Mechanical Center - P Dr. V. V. P. COE, Ahmednagar

TOW/OR

Minimum Marks for Passing . 30

Date: 27/05/2024

Name of the Examiners

1. Gonesh Karale 2 DB Thange

Examination B.E 2019

Day: Monday

Subject:Project Stage - II Maximum Marks: 50.2...

Address of Examiners
Premium trans, Pune

DWPCOE

Signature of Examiners

Sr. No.	Exam. Seat Number	Marks Obtained	Full Name of the Candidate	Signature of the Candidate
01	B190090802	4 39	ADITYA RAVINDRA SHINDE	Arude
02	B190090806	42	ASERI SHIVAM NANDKISHOR	Hirle
03	B190090808	43	BADE SHANTANU RAVINDRA	Bolle
04	B190090809	42	BAKAL GAURAV SANJAY	CAD
05	B190090810	43	BAKAL NARENDRA RAJENDRA	BOHOVA
06	B190090816	41	BHOSALE OMKAR ASHOK	Mahosale.
07	B190090819	42	DAHATONDE GAURAV SHANKAR	THERE
08	B190090820	44	DANGAT AKSHAY RADHAKISAN	Property
09	B190090828	42	GAWARE PRAJITA MOHAN	CO
10	B190090833	42	JAWALE PRATIK SHRIKANT	CEL
11	B190090838	43	KHAN ARIB MARUF	Chipper.
12	B190090839	38	KOKANE SAIRAJ BALASAHEB	-41
13	B190090843	40	KRISHNA SAMBHAJI GUGALE	Guyalet
14	B190090846	39	LOKHANDE SUYASH SANJAY	State
15	B190090847	44	MADANE TANMAY SHIVAJI	madage
16	B190090849	840	MANCHE YASH RAJESH	Manale
17	B190090850	40	MANE OMKAR PRAVIN	Trace
18	B190090851	44	MOHITE VISHAL KASHINATH	Moule
19	B190090853	35	MULE GANESH BABASAHEB	Combe
20	B190090862	39	SHINDE ABHISHEK SUNIL	Thurs
21	B190090863	38 45	SONAWANE PREMDAS JAYPRAKASH	Sounds
22	B190090865	41	SUTAR PRATHMESH PANDIT	Between
23	B190090866	40 38	THITE OMKAR BALIRAM	o. thit
24	B190090868	43	TUNGAR SANKET BABASAHEB	Sante
25	B190090870	42	UGALE DIGVIJAY BALASAHEB	Varlet B

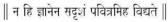
- 1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for examination.
- 2) Use separate sheets for different examinations though the head of passing is same for different
- 3) At the end of last entry for any examination, in this from, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing and failing(along with pass percentage) in the examination.

Total Student present:-....Total Student absent:-....Total Student pass:-....Total Student fail:-....

% Result=.....

Prof. (Dr) R. R. Navthar

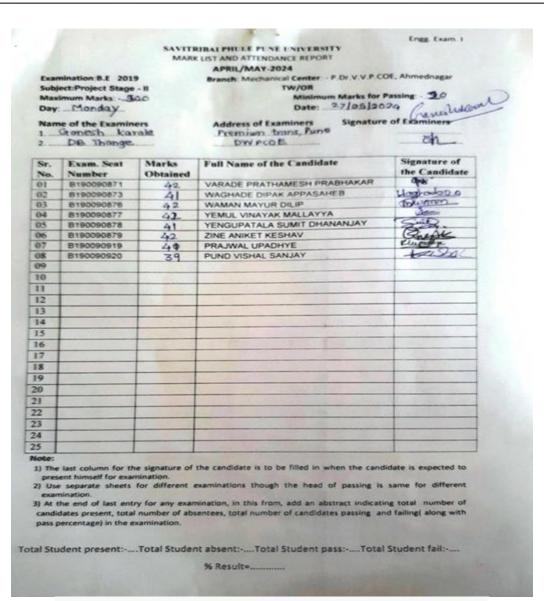
PRINCIPAL Dr. Vitheirao Vithe Patil





Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161





Prof. (Dr) R. R. Navthar

Dul PRINCIPAL
Dr. Vithelrao Vithe Patil
College of Engineering
Ahmednagar



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



SAVITRIBAL PHULE PLNE UNIVERSITY MARK LIST AND ATTENDANCE REPORT APRIL/MAY-2024

Engg Exam. I

Examination: B.E 2019 Subject:Project Stage - II Maximum Marks: -...100

Branch: Mechanical Center: - P.Dr.V.V.P.COE, Ahmednagar

TW/QR

Minimum Marks for Passing - 40 Date: 27/05/2024

Day: Monday Name of the Examiners 1. Ganesh karale

2 DB Thange

Address of Examiners Premium trubs, Pune

Signature of Examiners Con Lagrand

DWPCOE

Sr. No.	Exam. Seat Number	Marks Obtained	Full Name of the Candidate	Signature of
01	B190090802	8	ADITYA RAVINDRA SHINDE	the Candidate
02	B190090806	85	ASERI SHIVAM NANDKISHOR	- Paul
03	B190090808	88	BADE SHANTANU RAVINDRA	O tolky
04	B190090809	86	BAKAL GAURAV SANJAY	Proces
05	B190090810	90	BAKAL NARENDRA RAJENDRA	RoHOM
06	B190090816	86	BHOSALE OMKAR ASHOK	
07	B190090819	88	DAHATONDE GAURAV SHANKAR	Ashosar
08	B190090820	891	DANGAT AKSHAY RADHAKISAN	The state of the s
09	B190090828	97	GAWARE PRAJITA MOHAN	N dray
10	B190090833	92 88	JAWALE PRATIK SHRIKANT	CHARLE .
11	B190090838	90	KHAN ARIB MARUF	200
12	B190090839	84	KOKANE SAIRAJ BALASAHEB	Michael .
13	B190090843	85	KRISHNA SAMBHAJI GUGALE	-
14	B190090846	85	LOKHANDE SUYASH SANJAY	Trypeter
15	B190090847	92	MADANE TANMAY SHIVAJI	CA
16	B190090849	87	MANCHE YASH RAJESH	Drudgal
17	B190090850	86	MANE OMKAR PRAVIN	Jeranne
18	B190090851	90	MOHITE VISHAL KASHINATH	
19	B190090853	86	MULE GANESH BABASAHEB	Molute
20	B190090862	88	SHINDE ABHISHEK SUNIL	Comme.
21	B190090863	86	SONAWANE PREMDAS JAYPRAKASH	shurs
22	B190090865	83	SUTAR PRATHMESH PANDIT	Sonaurity
23	B190090866	86	THITE OMKAR BALIRAM	ortu.
24	B190090868	895		o thite
25	B190090870	88.	TUNGAR SANKET BABASAHEB	Canket
Note		08.	UGALE DIGVIJAY BALASAHEB	Toales 13

- 1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for examination.
- 2) Use separate sheets for different examinations though the head of passing is same for different
- 3) At the end of last entry for any examination, in this from, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing, and failing(along with pass percentage) in the examination.

Total Student present:-....Total Student absent:-....Total Student pass:-....Total Student fail:-....

% Result=.....



Ahmednagar

|| न हि ज्ञानेन सदृशं पवित्रमिह विद्यते ||

Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Engg. Exam. I SAVITRIBAI PHULE PUNE UNIVERSITY

MARK LIST AND ATTENDANCE REPORT APRIL/MAY-2024

Branch: Mechanical Center: - P. Dr. V. P. COE, Ahmednagar

TW/OF

Minimum Marks for Passing:

27/05/2024

Date: Signature of Examiners **Address of Examiners**

Name of the Examiners 1. Ganesh karale 2 DB Thange

Examination B.E 2019

Subject:Project Stage - II

Maximum Marks: - 100

Day Monday

Premium Trans, Pune DWPCDE

Sr. No.	Exam. Seat Number	Marks Obtained	Full Name of the Candidate	Signature of the Candidate
01	B190090871	84	VARADE PRATHAMESH PRABHAKAR	Ov.
02	B190090873	86	WAGHADE DIPAK APPASAHEB	Magradon a
03	B190090876	88	WAMAN MAYUR DILIP	TONISTON A
04	B190090877	88	YEMUL VINAYAK MALLAYYA	View
05	B190090878	8.5	YENGUPATALA SUMIT DHANANJAY	Suita
06	B190090879	86	ZINE ANIKET KESHAV	GneAK
07	B190090919	88.	PRAJWAL UPADHYE	Ungarage.
08	B190090920	84	PUND VISHAL SANJAY	KLOUL.
09				
10				
11				
12				
13				
14				
15				
16		1		
17		-		
18				
19		1		
20				
21				
22				151 100
23				
24				
25	20.00	1		
Note		1		

- 1) The last column for the signature of the candidate is to be filled in when the candidate is expected to present himself for examination.
- 2) Use separate sheets for different examinations though the head of passing is same for different
- 3) At the end of last entry for any examination, in this from, add an abstract indicating total number of candidates present, total number of absentees, total number of candidates passing and failing(along with pass percentage) in the examination.

Total Student present:Total Student absent:Total Student pass:Total Student fail:	
% Result=	



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



A

Project Report

on

"STRUCTURALANALYSISOFLAYEREDCOMPOSITE"

Submitted to

Savitribai Phule Pune University, Pune

In partial fulfillment of the requirement for the degree of Bachelor of Engineering in Mechanical Engineering

Submittedby:

Mr. Jawale Pratik Shrikant (B190090833)

Mr. Sutar Prathamesh Pandit (B190090865)

Mr. Mane Omkar Pravin (B190090850)

Mr. Upadhye Prajwal Pravin (72140336M)

Under the Guidance of

Dr. K.M. Markad

Department of Mechanical Engineering

Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar [2023-24]



Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Department of Mechanical Engineering

Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar

CERTIFICATE

ThisistocertifythatthefollowingStudents

(B190090833) Mr.JawalePratikShrikant

Mr.SutarPrathameshPandit (B190090865)

Mr.ManeOmkarPravin (B190090850)

Mr. Upadhye Prajwal Pravin (72140336M)

have successfully completed the project entitled

"Structuralanalysis of layered composite

inthepartialfulfillmentofBachelorofEngineering-Mechanical EngineeringofSavitribaiPhulePuneUniversity,duringacademicyear 2023-24.

Date:

Place: Ahmednagar





ACKNOWLEDGEMENT

Every orientation work has imprint to many people and this work is no different. This work give susan opportunity to express deep gratitude for the same.

While preparing this project work received endless help from number of people. This report would be incomplete if we don't convey our sincere thanks to all those who were in involved.

First and foremost, we would like to thank our respected guide **Dr. K. M.Markad** & **Dr. R. R. Navthar** (**Head of Mechanical Engineering Department**) for giving us an opportunity to present this project and his indispensable support, priceless suggestions and valuable time. Finally, we wish to thanks our friends and our families for being supportive of us, without whom this project would not have seen the light of day.

Every work is an outcome of full-proof planning ,continuous hardwork and organized effort. This work is a combination of all the three put together sincerely.

Mr. Jawale Pratik Shrikant Mr. Sutar Prathamesh Pandit

Mr. Mane Omkar P.

Mr. Upadhye Prajwal Pravin

Index

Chapter	Title	Pageno
no		
	Acknowledgements	iii
	Index	iv
	List of figures	V
	Listoftables	vii
	Abstract	viii
1	Introduction	1
1.1	Classificationofcompositematerial	3
1.2	Need ofcompositematerial	5
1.3	Problemstatement	7
2	Literaturesurvey	8
3	Objectiveofwork	17
3.1	Motivation	17
3.2	Objective	17
4	Structuralcompositematerial	18
4.1	Materialandsamplepreparation	18
4.2	Testingandcharacterizationofcomposites	26
4.3	Result & analysis	29
	Conclusion& futurework	37
	References	38

ListofFigures

Fig.No.	Nameoffigure	Pageno
1	Graphicalimageofcomposite material	2
2	Natureofpolymermatrixcomposite panel	2
3	Classificationofcompositematerial	4
4	Natureoflaminatedcomposite	18
5	Polymermatrixcontains(a)Bisphenol-A-basedepoxyresin(LY 556) and (b) aliphatic amine (HY 951)	19
6	Theunidirectionalcarbonfiber sheet	19
7	SchematicflowchartofthemanufacturingofCFRPcomposite	20
8	Weighingofepoxy&hardenerhomogenousmixture	21
9	Preparationoffibermatrixcomposite sample	22
10	Applicationofrollerofextractionofexcessmatrix	23
11	Applicationoffinal layer ofmatrixoverfiber	24
12	Curingofpreparedsample	25
13	EpoxyandCFRPpreparedsamples	23
14	UTMutilizedintheexperiment(InstronUTM5582)	24
15	FE-SEMutilizedintheexperiment(NovaNanoFE-SEM450)	24
16	CarbonEpoxylayeredcomposite	28
17	Forcevsdisplacementgraphofepoxy	29
18	Stress vsstraingraphofepoxy	30
19	ForcevsdisplacementgraphofCFRP	30

20	Stress vsstraingraphofCFRP	31	

21	bucklingmodeshapeevaluationfor(a)thepresineCFRP, (b) 0.1%, (c)0.3%,(d)0.5% and(e)0.7% MWCNT content in modified matrix multi-phase	35
22	MorphologicalcharacterizationbyFESEM	37

ListofTables

Table No.	Nameoftable	Pageno
1	Comparisonofpropertiesofepoxy,CFRP,aluminium,&copper	32
2	ComparisonofcriticalbucklingloadevaluatedbyAnalyticaland FEM approach	34

ABSTRACT

This work presents the effect of the bending, buckling, preparation and analysis of layered composites concerning their mechanical and structural properties. The process of fabrication include preparation of layered composite in 0° orientation, by subsequent molding by hand layup method. The appropriate post-processing was performed for the curing and cutting to prepare the samples for the mechanical characterizations as per the ASTM standards. The study's primary objectives encompass interpretation of Mechanical behavior, modeling and simulation of manufactured composite material. By addressing these objectives, this study aims to enhance the knowledge and understanding of Polymer composites, ultimately contributing to the irreliable and efficient utilization across industries. The findings will be of significance to engineers, researchers, and industries interested in exploiting the exceptional properties of PCs for improved structural integrity and performance in various applications.

