

ADITYA

COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada, Accredited by NAAC

Ph: (+91884) 2326221, (+91) 99591 76665, Email: office@acet.ac.in, Website: www.acet.ac.in

2.2.1 The Institution assesses the learning levels of the students and organises special programs for advanced learners and slow learners

INDEX

S. No.	Description	Page Number
1	Learning analysis- Certified by the head of the institution	2
2	Supporting document	3



Principal

PRINCIPAL
Aditya College of
Engineering & Technology
SURAMPALEM- 533 437



ADITYA NAGAR, ADB ROAD, SURAMPALEM - 533 437, NEAR KAKINADA, E.G.DIST., A.P., INDIA

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that all the faculty members are tracking weak learners and advanced learners based on their internal exam performance. The following measures have been taken to improve the learning levels of the students. A sample copy is as follows is attached for:

1. Weak learner tracking analysis
2. Advanced learner tracking analysis
3. Remedial classes for weak learners
4. Encouraging to participate in technical events



Principal

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SURAMPALEM- 533 437



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Index of supporting documents

S. No.	Description	Page Number
1	Weak learners tracking analysis	4
2	Advanced learners tracking analysis	5
3	List of weak learners	6
4	List of advanced learners	7
5	Circular and schedule for remedial classes	8
6	Remedial classes summary	9
7	Attendance sheet	10
8	Sample proctoring sheets of weak students	11
9	Sample answer sheets of weak students	17
10	List of student internships	23
11	Sample certificates of internships	24
12	Automobile club events for advanced learners	30
13	Participation certificates in automobile events	31
14	Hands on experience on automotive	35
15	Training programmes for advanced learners	40


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Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem - 533437

Department of Mechanical Engineering

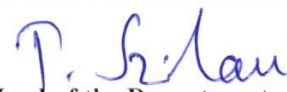
Weak Learners tracking Analysis

AY: 2020-21 1st Semester

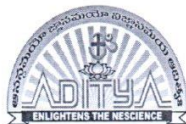
Section A

		Section A	Number of Weak Learners		
S.NO	FACULTY NAME	COURSE NAME	AT SEMESTER START	AFTER 3 weeks instruction	AFTER 1 Internal exam
	2-1				
1.	Mr. V. Kiran Kumar	Material Science and Metallurgy	12	9	7
2.	Dr. M. Murugan	Mechanics of Solids	15	10	8
3.	Mr. V. Siva Nagi Reddy	Thermodynamics	18	15	10
4.	Ms. A. Swathi	Production Technology	12	8	6
5.	Mr. G B Chandra Mouli	Vector Calculus & Fourier Transforms	26	22	19
	3-1				
6.	Dr P Gangadhar Rao	Dynamics of Machinery	17	14	12
7.	Dr. T. Srihari	Metal Cutting & Machine Tools	14	10	7
8.	Mr. Abdul Arif	Design of Machine Members-II	15	12	10
9.	Mr. A. Chiranjeevi V S Prasad	Operations Research	18	15	10
10.	Mr. M. Srinivas	Thermal Engineering -II	20	15	12
	4-1				
11.	Mr. P. Jai Kishan	Mechatronics	15	10	7
12.	Mr. CH. Ram Prasad	CAD/CAM	16	11	9
13.	Mr. K. Vijay	Finite Element Methods	18	12	10
14.	Dr. Stanley Ebnezer	Power Plant Engineering	12	10	7
15.	Dr. Pramod Kumar	Additive Manufacturing	10	8	5
16.	Mr. K. Suribabu	Advanced Materials	12	8	6


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Department of Mechanical Engineering

Advanced Learners tracking Analysis

AY: 2020-21 1st Semester

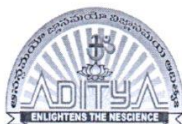
Section A

VI. 2020-21 I Semester			Section A		
S.NO	FACULTY NAME	COURSE NAME	AT SEMESTER START	AFTER 3 weeks instruction	AFTER I Internal exam
2-1					
1.	Mr. V. Kiran Kumar	Material Science and Metallurgy	10	12	15
2.	Dr. M. Murugan	Mechanics of Solids	9	10	12
3.	Mr. V. Siva Nagi Reddy	Thermodynamics	6	8	10
4.	Ms. A. Swathi	Production Technology	10	13	15
5.	Mr. G B Chandra Mouli	Vector Calculus & Fourier Transforms	10	10	12
3-1					
6.	Dr P Gangadhar Rao	Dynamics of Machinery	13	15	16
7.	Dr. T. Srihari	Metal Cutting & Machine Tools	15	17	20
8.	Mr. Abdul Arif	Design of Machine Members-II	12	12	13
9.	Mr. A. Chiranjeevi V S Prasad	Operations Research	8	10	12
10.	Mr. M. Srinivas	Thermal Engineering – II	6	8	8
4-1					
11.	Mr. P. Jai Kishan	Mechatronics	14	14	14
12.	Mr. CH. Ram Prasad	CAD/CAM	10	10	12
13.	Mr. K. Vijay	Finite Element Methods	13	13	13
14.	Dr. Stanley Ebnezer	Power Plant Engineering	12	13	14
15.	Dr. Pramod Kumar	Additive Manufacturing	13	16	18
16.	Mr. K. Suribabu	Advanced Materials	12	12	15


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Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem – 533437

Department of Mechanical Engineering

Weak Learners

Subject: Finite Element Methods

Class: IV B. Tech - Section A

AY: 2020-21 1st Semester

Basis: Semester Beginning

S. No	Roll. No	Student Name
1	17P31A0307	ASAPU SVSSV VIJAYKUMAR
2	17P31A0313	EDA PRADEEP
3	17P31A0317	GORRELA SUBHAKAR GANESH
4	17P31A0318	KOTHA JAYENDRA DURGA VENKATA KRISHNA
5	17P31A0319	LANKA DURGA SAILENDRA
6	18P35A0301	ADARI ROHITH
7	18P35A0302	AMARAPURI SAI YASWANTH
8	18P35A0304	ATHI UMAMAHESWARAO
9	18P35A0307	BANDI HARISH
10	18P35A0311	BUDATHA SURYA VARMA
11	18P35A0315	CHINTA RAVITEJA
12	18P35A0318	CHOLLANGI SARATH CHANDRA KALYAN
13	18P35A0321	DAVULURI JAI GANESH
14	18P35A0326	GANISETTI SUBRAHMANYAM
15	18P35A0327	GANTA THARUN PHANI SURYA PRASANT
16	18P35A0329	GORAKAPUDI SAICHAKRADHAR
17	18P35A0330	GORTHI SIVA VIJAY
18	18P35A0331	GUBBALA BENNY KUMAR

Faculty Signature

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Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem - 533437

Department of Mechanical Engineering

Advanced Learners

Subject: Finite Element Methods

Class: IV B. Tech - Section A

Basis: Semester Beginning

AY: 2020-21 1st Semester

S. No	Roll. No	Student Name
1	17P31A0302	AKULA SAINAVEEN
2	17P31A0304	AMARADI VEERA VENKATA GANESH
3	17P31A0306	ARATA SRINIVAS
4	17P31A0309	BURRI SIVA
5	17P31A0312	DUDALA SURESH
6	17P31A0316	GOPISETTI VAMSI
7	17P31A0320	MADAKAM YOGESH CHANDRA CHAITANYA
8	17P31A0328	POTHULA SRINIVAS
9	18P35A0312	BUDDALA DURGA PRASAD
10	18P35A0316	CHINTALA JAGADEESH
11	18P35A0320	DAMA SATHEESH
12	18P35A0328	GOLAGANI KISHORE
13	18P35A0332	B PRABHAKAR RAO

Faculty Signature

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Department Of Mechanical Engineering

Date: 20-10-2020

CIRCULAR

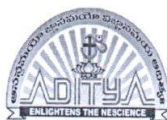
All the faculty of VII Semester are requested to conduct the remedial classes for slow learners from 26.10.2020. The timetable is attached below

Day	Timing	Subject	Faculty
Monday	03:30 PM to 04:30 PM	Mechatronics	Mr. V. Surya Prakash
Tuesday		CAD/CAM	Mr. E. Raghavendra
Wednesday		Finite Element Methods	Mr. K. Vijay
Thursday		Power Plant Engineering	Dr. Stanley Ebnezer
Friday		Additive Manufacturing	Dr. Pramod Kumar
Saturday		Advanced Materials	Mr. K. Suribabu


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Department Of Mechanical Engineering

Remedial Classes Summary

Academic Year – (2020-21)

Name of the Course Instructor: Mr. K. Vijay

Semester : VII

Name of the subject : Finite Element Methods

No of slow learners : 55

No of remedial hours :06

S.No	Date	Topic	Signature
1	28-10-20	Finite Element procedure	K. Gija
2	28-10-20	Relationship between displacement stress and strain	K. Gija
3	29-10-20	Weighted residual methods	K. Gija
4	4-11-20	1-Dimensional Problems Potential Energy Approach	K. Gija
5	4-11-20	Applying Boundary conditions	K. Gija
6	11-11-20	Problems on trusses and beams	K. Gija
7	11-11-20	Two-Dimensional Analysis, problems	K. Gija
8	18-11-20	Stress - strain relationship in CST	K. Gija
9	18-11-20	Two-dimensional Analysis of a 4 noded element	K. Gija
10	25-11-20	Heat-transfer & Vibration Analysis	K. Gija

Signature of Course Instructor

Signature of HOD

h
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Aditya College of Engineering & Technology
Aditya Nagar, ADB Road, Surampalem – 533437
Department Of Mechanical Engineering

Academic Year – (2020-21)

Name of the Subject: FINITE ELEMENT METHODS

Attendance sheet-Section-I

S.No	Roll No	Name of the student	29/10	29/10	4/11	11/11	18/11	25/11			
1	17P31A0307	ASAPU SVSSV VIJAYKUMAR	2	3	5	7	9	10			
2	17P31A0313	EDA PRADEEP	2	3	5	7	9	10			
3	17P31A0317	GORRELA SUBHAKAR GANESH	2	3	5	7	A	8			
4	17P31A0318	KOTHA JAYENDRA DURGA VENKATA KRISHNA	2	3	5	7	9	10			
5	17P31A0319	LANKA DURGA SAILENDRA	2	3	5	7	9	10			
6	18P35A0301	ADARI ROHITH	2	A	4	6	8	9			
7	18P35A0302	AMARAPURI SAI YASWANTH	2	3	5	7	9	10			
8	18P35A0304	ATHI UMAMAHESWARAO	2	3	5	7	9	10			
9	18P35A0307	BANDI HARISH	2	3	5	7	9	10			
10	18P35A0311	BUDATHA SURYA VARMA	2	3	5	7	9	10			
11	18P35A0315	CHINTA RAVITEJA	2	3	5	7	A	8			
12	18P35A0318	CHOLLANGI SARATH CHANDRA KALYAN	2	3	5	7	9	10			
13	18P35A0321	DAVULURI JAI GANESH	2	3	5	7	9	10			
14	18P35A0326	GANISETTI SUBRAHMANYAM	2	A	4	6	8	9			
15	18P35A0327	GANTA THARUN PHANI SURYA PRASANT	2	3	5	7	9	10			
16	18P35A0329	GORAKAPUDI SAICHAKRADHAR	2	3	5	7	9	10			
17	18P35A0330	GORTHI SIVA VIJAY	2	3	5	7	9	A	A		
18	18P35A0331	GUBBALA BENNY KUMAR	2	3	5	7	9	10			

Signature of Course Instructor

Signature of HOD

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A black and white portrait of a man with dark hair and a mustache, wearing a light-colored military uniform with dark shoulder epaulettes. He is looking directly at the camera with a neutral expression.

Phone No } Parent : 8 0 7 4 8 8 7 0 5 0 (Younger brother - 7981214605)
Student : 8 1 0 6 6 8 7 1 5 84 (whole app)

[illegible]

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SURAMPALEM- 533 437

III Semester					IV Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
MET-A	20	20	D	3	KOM	20	22	F
MMS	20	23	F	0	TE-I	18	23	C
MOS	25	21	C	3	PT	13	24	D
TD	16	16	C	3	DMN-1	19	20	C
FMTHM	25	20	B	3	MD			O
IEDP			O	2	JEM	11	20	C
EFE			S	2	FMTHM Lab			O
MOS			A	2	PT Lab			O
SGPA					SGPA : 58.3%			
CGPA : 6.00					CGPA : 6.58			
Month					Month			
Atten. %					Atten. %			

V Semester					VI Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
DOM	21	15	A	3	Mech	14		B
MCHT	22	17	C	3	ICS	21		C
DMN-II	18	17	B	3	RAC	22		B
OR	19	21	D	3	HT	25		B
T.E-II	21	23	C	3	GES	22		C
BM Lab			S	2	HT Lab			O
MCHT Lab			S	2	MJ Lab			O
TE Lab			O	2	CFD Lab			O
SGPA : 7.24					SGPA : 7.87			
CGPA : 8.407					CGPA : 7.27			
Month : June					Month : Dec			
Atten. % : 65.83					Atten. % : 76.59			

VII Semester					VIII Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
Mech	3	14	A	3	PPC	11	7	C
Adm	23	14	C	3	UMP	13	4	A
FCM	9	14	D	3	AE	14	8	A
PPE	17	12	B	3	NDE	13	11	B
Adm	15	14	B	3				
AVM	23	15	A	3				
Rad/Copy		13	O	2				
Copy Lab			A	2				
SGPA : 7.23					SGPA : 8.63			
CGPA :					CGPA :			
Month					Month			
Atten. %					Atten. %			

ADHI Road, Aditya Nagar, Surampalem - 533 437, E.G Dist., A.P.

Photo

[illegible]

Diplom

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SURAMPALEM- 533 437

III Semester					IV Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
MCA	23	21	C	3	KOM	13	22	C
MMS	20	17	C	3	T.E-I	11	23	C
MOS	23	21	F	0	PT	14	22	B
TD	19	21	F	0	PMH-I	5	22	C
FM/IM	21	20	D	3	N.D			D
CCDF			D	2	ILM	19	23	F
EEC			A	2	FM/IM Lab			O
MOS			A	2	PT Lab			O
SGPA : 6.22 CGPA :					SGPA : 50.87% CGPA : 5.84			
Month:					Month:			
Atten. %:					Atten. %:			

V Semester					VI Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
DOM	19	19	D	3	HET			D
DMOM	24	23	B	3	JCS			D
PMH-II	15	14	C	3	PAC			B
OR	18	17	B	3	HT			C
T.E-II	18	21	F	0	TES			C
TCN Lab			S	2	MLab			O
MEM Lab			S	2	MT Lab			O
TEL Lab			S	2	RFN Lab			S
SGPA : 6.14 CGPA :					SGPA : 6.90 CGPA : 6.92			
Month: June July Aug					Month: Dec Jan			
Atten. %: 37.65 79.45 70.80					Atten. %: 49.16 56.98			

VII Semester					VIII Semester			
Course Name	I Sessional Marks	II Sessional Marks	Grade	Credits	Course Name	I Sessional Marks	II Sessional Marks	Grade
Math.	3	12	C	3	PPC	12	13	C
Maths	23	15	B	3	QHP	13	10	A
REM	11	14	D	3	AE	19	14	A
PPC	16	12	C	3	NDE	12	21	B
ADM	21	14	D	3				
AYM	22	13	B	3				
Maths Lab			D	2				
Maths Lab			S	2				
SGPA : 6.91 CGPA :					SGPA : 8.63 CGPA :			
Month:					Month:			
Atten. %:					Atten. %:			

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INTERNAL EXAMINATION ANSWER BOOKLET

ACADEMIC YEAR 201 - 201

H.T. No.

1	7	P	3	1	A	0	3	1	8
---	---	---	---	---	---	---	---	---	---

P3

Name of the Student : K. Jayashree

Year : I / II / III / IV ☒ Semester : I / II Branch : Mech Section : A / B / C / D

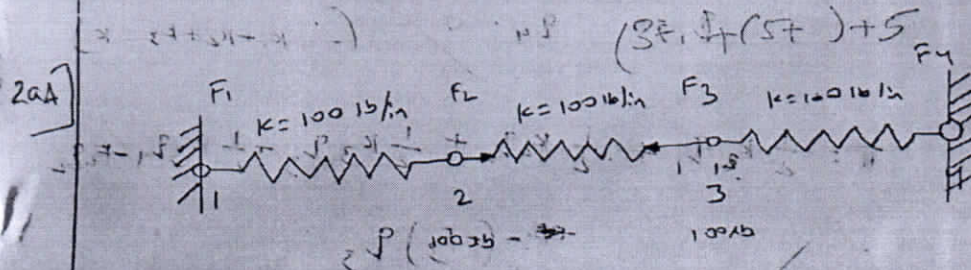
Subject : Finite element methods Mid : I / II

No. of Additional Used : 1 Course : B.Tech/M.Tech/MCA/MBA/MAM

Signature of the Candidate K. Jayashree

Signature of the Invigilator [Signature]

Marks obtained /Max.Marks
<u>13</u> / <u>15</u>
Evaluated by
Name: <u>K. Ujjay</u>
Signature: <u>[Signature]</u>



The nodal displacement of F_1 & F_2 and q_1 and q_2

$$\delta_1 = (q_1 - q_2)$$

The nodal displacement of F_2 and F_3 and q_2 and q_3

$$\delta_2 = (q_2 - q_3)$$

The nodal displacement of F_3 and F_4 and q_3 and q_4

$$\delta_3 = (q_3 - q_4)$$

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INTERNAL EXAMINATION ANSWER BOOKLET ACADEMIC YEAR 20 - '20

H.T. No.

1	7	P	0	1	A	0	3	1	8
---	---	---	---	---	---	---	---	---	---

 College Code

P3

Name of the Student: K. Jayendra Kumar

Year: IV Semester: I/II Branch: Mech

Subject: FEEM Mid: I/II

No. of Additional's Used: 4

Signature of the Candidate

Signature of the Invigilator

Q. No	A	B	C	Total
1	9			9
2	14			14
3	14			14
4				
Grand Total				37
Scaled Total				12.25
Evaluated by				
Signature				
Name				

2A

Jacobian matrix

$$U = N_1 q_1 + N_2 q_3 + N_3 q_5$$

$$V = N_1 q_2 + N_2 q_4 + N_3 q_6$$

$$N_1 = \xi$$

$$N_2 = \eta$$

$$N_3 = (1 - \xi - \eta)$$

$$U = \xi q_1 + \eta q_3 + (1 - \xi - \eta) q_5$$

$$U = \xi q_1 + \eta q_3 + q_5 - \xi q_5 - \eta q_5$$

$$U = \xi (q_1 - q_5) + \eta (q_3 - q_5) + q_5$$

$$V = \xi q_2 + \eta q_4 + (1 - \xi - \eta) q_6$$

$$V = \xi q_2 + \eta q_4 + q_6 - \xi q_6 - \eta q_6$$

$$V = \xi (q_2 - q_6) + \eta (q_4 - q_6) + q_6$$

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INTERNAL EXAMINATION ANSWER BOOKLET

ACADEMIC YEAR 201 - 201

H.T. No.	1	8	P	3	5	A	0	3	2	9	P3	Marks obtained /Max.Marks
Name of the Student :	61. Sai Chakradhar											11/15
Year : I / II / III / IV	Semester : I / II		Branch : Mechanical		Section : A / B / C / D							
Subject : Finite element method												Mid : I / II
No. of Additional Used :												Course : B.Tech/M.Tech/MCA/MBA/MAM
Signature of the Candidate												Signature of the Invigilator
												Evaluated by Name: Signature:

- Advantages of FEA
- 1) Mode with the normal body structure at the boundary.
 - 2) Find out the moment with in unshaped bodies.
 - 3) It is not depending upon the temperature and heat properties.
 - 4) Dynamic structure bodies can be estimated.
 - 5) It is used to minimize the complexity of problem.
- Applications:-
- Natural structure :-
- 1) fluid flow
 - 2) Heat pumps
 - 3) electrical and magnetic field of the structure.

INTERNAL EXAMINATION ANSWER BOOKLET

ACADEMIC YEAR 20 - 20

H.T. No.

1	8	P	3	5	A	0	3	2	9
---	---	---	---	---	---	---	---	---	---

 College Code

P3

Name of the Student: G. Sai Chakradhar

Year: IV Semester: I/II Branch: Mechanical

Subject: Finite element methods Mid: I/II

No. of Additional Used:

G. Sai Chakradhar
Signature of the Candidate

J. S. Reddy
Signature of the Invigilator

Q. No	A	B	C	Total
1	13			13
2	13			13
3	14			14
4				
Grand Total				40
Scaled Total				100
Evaluated by				
Signature				
Name				K. S. Reddy

3, A)

Given data,

length = 8 cm

width = 4 cm

thickness = 1 cm

$k = 3 \text{ W/cmK}$

$h = 0.1 \text{ W/cm}^2\text{K}$

Temperature at the tip = 20°C

$A_{\text{tip}} = 2(4+1) = 10$

We know the formula

$$KT = F$$

stiffness matrix of element ①

$$K_1 = \frac{kA}{L_1} \begin{bmatrix} +1 & -1 \\ -1 & +1 \end{bmatrix} + \frac{hAt}{6} \begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$$

$$K_1 = \frac{3 \times 10}{4} \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix} + \frac{0.1 \times 10 \times 4}{6} \begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}$$

$$K_1 = \begin{bmatrix} 3 & -3 \\ -3 & 3 \end{bmatrix} + \begin{bmatrix} 1.33 & 0.66 \\ 0.66 & 1.33 \end{bmatrix}$$

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Aditya Nagar, ADB Road, Surampalem, E.G. Dist., Andhra Pradesh.

INTERNAL EXAMINATION ANSWER BOOKLET

ACADEMIC YEAR 2020 - 2021

H.T. No. 1 8 P 3 5 A 0 3 2 6

P3

Marks obtained / Max Marks

Name of the Student : G. Subrahmanyam

Year : I / II / III / IV Semester : I / II Branch : Mechanical Section : A / B / C / D

Subject : FEM Mid : I / II

No. of Additional Used : Course : B.Tech/M.Tech/MCA/MBA/MAM

G. Subrahmanyam
Signature of the Candidate

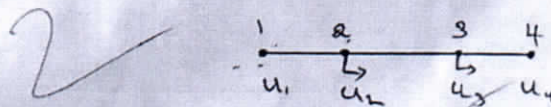
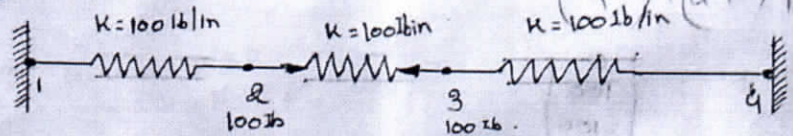
Signature of the Invigilator

Evaluated by

Name:

Signature:

Qa Given data :-



$$K = 100 \text{ lb/in.} \quad [\because K_1 = K_2 = K_3]$$

$$\text{Load at node 2 } u_2 = 100 \text{ lb}$$

$$\text{Load at node 3 } = -100 \text{ lb}$$

$$K_{e1} = \begin{bmatrix} K & -K \\ -K & K \end{bmatrix} = 10^2 \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$$

$$K_{e2} = \begin{bmatrix} K & -K \\ -K & K \end{bmatrix} = 10^2 \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$$

$$K_{e3} = \begin{bmatrix} K & -K \\ -K & K \end{bmatrix} = 10^2 \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$$

$$K = K_{e1} + K_{e2} + K_{e3}$$

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Recognized by UGC under Section 2(f) and 12(B) of UGC Act 1956

Aditya Nagar, ADB Road, Surampalem, E.G.Dt-531437 Ph: 9959176665, 0884-2326212

INTERNAL EXAMINATION ANSWER BOOKLET

ACADEMIC YEAR 20 - 20

H.T. No.

1	8	P	3	5	A	0	3	2	6
---	---	---	---	---	---	---	---	---	---

 College Code

P3

Name of the Student: G. Subrahmanyam

Year: 1st Semester: I/II Branch: Mech

Subject: Finite element methods Mid: I/II

No. of Additional Used:

G. Subrahmanyam
Signature of the Candidate

[Signature]
Signature of the Invigilator

Q. No	A	B	C	Total
1	12			12
2	13			13
3	14			14
4				
Grand Total				39
Scaled Total				10.5
Evaluated by				
Signature				<u>[Signature]</u>
Name				<u>K. V. S. R.</u>

Q.1) given data:-

dir Temperature distribution = 10
width (b) = 8 cm
length (L) = 8 cm
width (w) = 4 cm
Thickness (t) = 1 cm

$$K = 8 \text{ W/cm}^2$$

heat transfer coefficient $h = 0.1 \text{ W/cm}^2$

Temperature at tip (T) = 20 deg



$$\text{Area} = w \times t = 4 \times 1 = 4 \text{ cm}$$

$$\begin{aligned} \text{Perimeter (P)} &= 2(w+t) \\ &= 2(4+1) \\ &= 2(5) \\ &= 10 \text{ cm} \end{aligned}$$



Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem – 533437

Department of Mechanical Engineering

List of Student Internships

S. No	Regd. No	Name of the Student	Company	Technology
1	18P35A0342	KARRI SURYA VENKATA PRAKASH RAO	RINL	Steel plant
2	18P35A0340	KANTHI ANAND PRASAD	RINL	Steel plant
3	18P35A0325	GAIPURI BHASKAR	RINL	Steel plant
4	18P35A0305	AVVARI N V A CHIRANJEEVA SANDEEP	RINL	Steel plant
5	16P31A0310	DWARAMPUDI GANA SAIKIRAN AVINASH RAJ	Reliance	Power plant
6	16P31A0346	THOTAKURA UDAY SHANKAR	ONGC	Mud pump
7	16P31A0333	PATAMSETTI VEERAVENKATARAMANA	NIT Rourkela	ANSYS
8	17P35A0322	VELAGALA SAIVIKAS REDDY	INTERNSHALA	(ISP)9.0
9	16P31A0310	DWARAMPUDI GANA SAIKIRAN AVINASH RAJ	INTERNSHALA	(ISP)9.0
10	18P35A0376	POLAVARAPU CHIRANJEEVI	steel plant	Engineering
11	18P35A0342	KARRI SURYA VENKATA PRAKASH RAO	RINL	Steel plant


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हेवी प्लेट्स एंड वेसल्स प्लांट, विसखापत्ताम - 530012, अ.प्र., भारत.

Bharat Heavy Electricals Limited

Heavy Plates & Vessels Plant, Visakhapatnam - 530012, A.P., INDIA

Ref: HRDC/B/07/2021

CERT.NO:6409/28.09.2021

Date: 01/11/2021

CERTIFICATE

This is to certify that Mr. PINDI BALU S/o Shri PINDI JAYABABU Studying B.Tech (Mech) in ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY, SURAMPALEM. Has done INTERNSHIP in BHEL-HPVP, Visakhapatnam from 28.09.2021 to 12.10.2021.

During the above period his CONDUCT & CHARACTER were found Very Good and we wish him a bright future.


(G Kuru Murthy) 11/2021

Dy. General Manager (HRDC & Security)

डी. जनरल मॅनेजर (HRDC & Security)
डी. जनरल मॅनेजर (HRDC & Security)
बी.एस.ई.एम. / एच.पी.वी./BHEL-HPVP,
विशाखापत्ताम/VISAKHAPATNAM-530 012

Tel. No. 0891-6681280, Fax: 6681700, e-mail: xxxx@bhel.in, website: www.bhel.com

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हेवी प्लेट्स एंड वेसल्स प्लांट, विसाखापत्तनाम - 530012, अ.प्र., भारत .

Bharat Heavy Electricals Limited

Heavy Plates & Vessels Plant, Visakhapatnam - 530012, A.P., INDIA

Ref: HRDC/B/07/2021

CERT.NO:6414/28.09.2021

Date: 01/11/2021

CERTIFICATE

This is to certify that Mr. VELNATI VENKATA SITA RAMA SIVA SAI S/o Shri VELNATI VENKATA KOTI THIRUPATHI RAO Studying B.Tech (Mech) in ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY, SURAMPALEM. Has done INTERNSHIP in BHEL-HPVP, Visakhapatnam from 28.09.2021 to 12.10.2021.

During the above period his CONDUCT & CHARACTER were found Very Good and we wish him a bright future.


(G Kuru Murthy)

Dy. General Manager (HRDC & Security)

महोदय,
महोदय (HRDC & Security)
Dy. General Manager (HRDC & Security)
बी.एच.ई.एल., एच.पी.वी./BHEL-HPVP,
विसाखापत्तनाम/VISAKHAPATNAM-530 012

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हेवी प्लेट्स एंड वसल्स प्लांट, विसाखापत्तनम - 530012, अ.प्र., भारत.

Bharat Heavy Electricals Limited

Heavy Plates & Vessels Plant, Visakhapatnam - 530012, A.P., INDIA

Ref: HRDC/B/07/2021

CERT.NO:6402/28.09.2021

Date: 01/11/2021

CERTIFICATE

This is to certify that Mr. KOVVURI MANIKANTA REDDY S/o Shri KOVVURI VENKATA REDDY Studying B.Tech (Mech) in ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY, SURAMPALEM. Has done INTERNSHIP in BHEL-HPVP, Visakhapatnam from 28.09.2021 to 12.10.2021.

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(G Kuru Murthy)

Dy. General Manager (HRDC & Security)

उप महा प्रबन्धक (HRDC & Security)
Dy. General Manager (HRDC & Security)
बीएचईएल, एचपीवीपी/भारत-एचपीवी
विसाखापत्तनम/VISAKHAPATNAM-530 012

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Bharat Heavy Electricals Limited

Heavy Plates & Vessels Plant, Visakhapatnam - 530012, A.P., INDIA

Ref: HRDC/B/07/2021

CERT.NO:6406/28.09.2021

Date: 01/11/2021

CERTIFICATE

This is to certify that Mr. MULAMPAKA AJAY S/o Shri MULAMPAKA RAMAKRISHNA Studying B.Tech (Mech) in ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY, SURAMPALEM. Has done INTERNSHIP in BHEL-HPVP, Visakhapatnam from 28.09.2021 to 12.10.2021.

During the above period his CONDUCT & CHARACTER were found Very Good and we wish him a bright future.


(G Kuru Murthy)

Dy. General Manager (HRDC & Security)

डी. जनरल मैनेजर (HRDC & Security)
बी.एस.पी.एल. भुवनेश्वरी/HPVP,
विसाखापट्टनाम/VISAKHAPATNAM-530 012

Tel. No. 0891-6681280, Fax: 6681700, e-mail: xxxx@bhel.in, website: www.bhel.com



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Bharat Heavy Electricals Limited

Heavy Plates & Vessels Plant, Visakhapatnam - 530012, A.P., INDIA

Ref: HRDC/B/07/2021

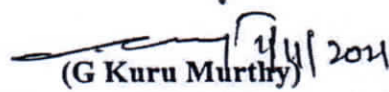
CERT.NO:6410/28.09.2021

Date: 01/11/2021

CERTIFICATE

This is to certify that Mr. PUPPALA RAVITEJA S/o Shri PUPPALA BHASKARA RAO Studying B.Tech (Mech) in ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY, SURAMPALEM. Has done INTERNSHIP in BHEL-HPVP, Visakhapatnam from 28.09.2021 to 12.10.2021.

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विसाखापत्तनम/VISAKHAPATNAM-530 012

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AUTOMOBILE CLUB:

SAEINDIA-ACET:

In the Department of Mechanical Engineering of Aditya College of Engineering & Technology, under SAEINDIA total 55 members of students from Mechanical, Electrical and Electronics, Electronics and communication Engineering are actively participating in the events of SAE BAJA. All the Automobile club students are participating in several activities. Here is a list which indicates the previous activities of Automobile club.

Table 1 Activities of Automobile club from 2016-17 onwards

Sl. No	Academic Year	Semester	Particulars/Event	No. of Students
1	2021-22	I	SAE BAJA	25
2	2020-21	I	SAE BAJA	25
3	2019-20	II	ETWDC	10
4	2019-20	II	GOKART - STEP CONE at GMRIT	23
5	2019-20	II	GOKART - SIEGE at ADITYA	23
6	2019-20	I	HANDS ON EXPERIENCE OF AUTOMOTIVES	208
7	2018-19	II	GOKART	18
8	2017-18	I	SAE BAJA	25
9	2016-17	II	ESVC - ISIE	25

SAE BAJA 2021-2022:

BAJA 2022 is the event organising by SAE INDIA in three phases of virtual round for scrutinizing the participants, virtual dynamic through IPG Car maker and Physical Dynamic Event in which have to participate with Fabricated ATV.

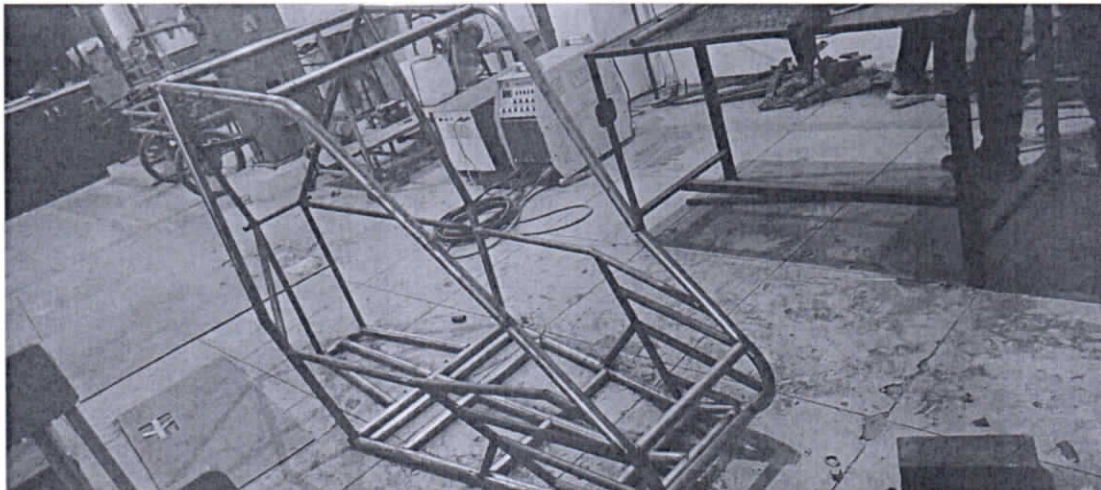


Figure 1 Fabrication of the ATV chassis



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SAE BAJA 2020-2021:

Due to pandemic situations event is completely organised through virtual mode by using IPG Car Maker for endurance of the vehicles along with other static rounds like business plan, design report. In this event totally 25 students from Mechanical, Electrical and Electronics, Electronics and communications Engineering with two faculty advisors from Mechanical are participated.

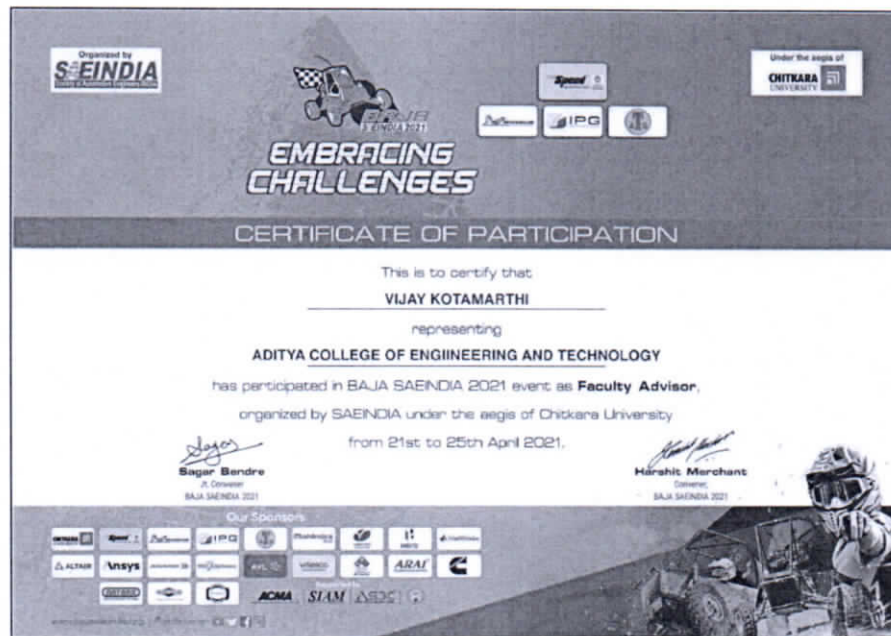


Figure 2 Certificate of Faculty advisor

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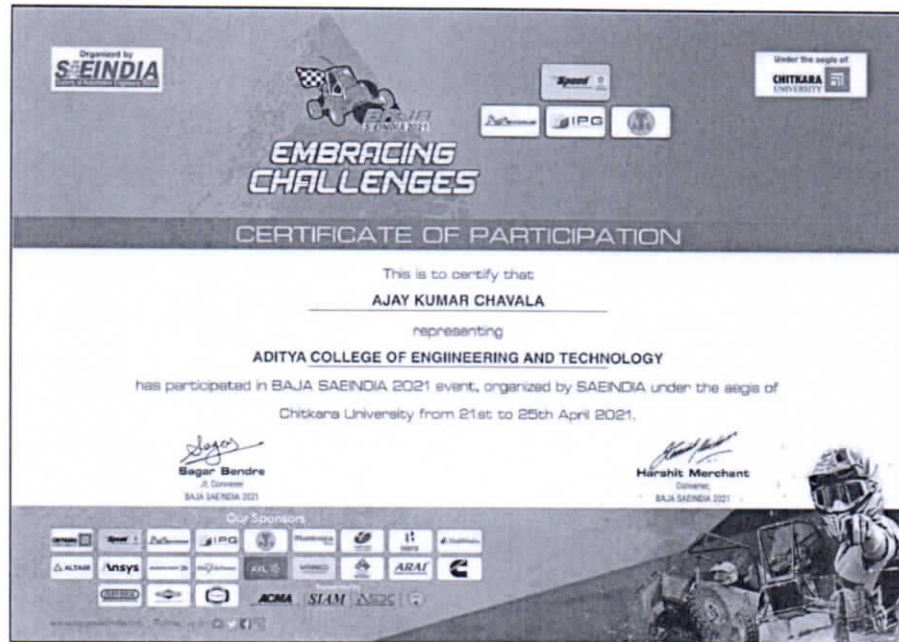


Figure 3 Certificate of student

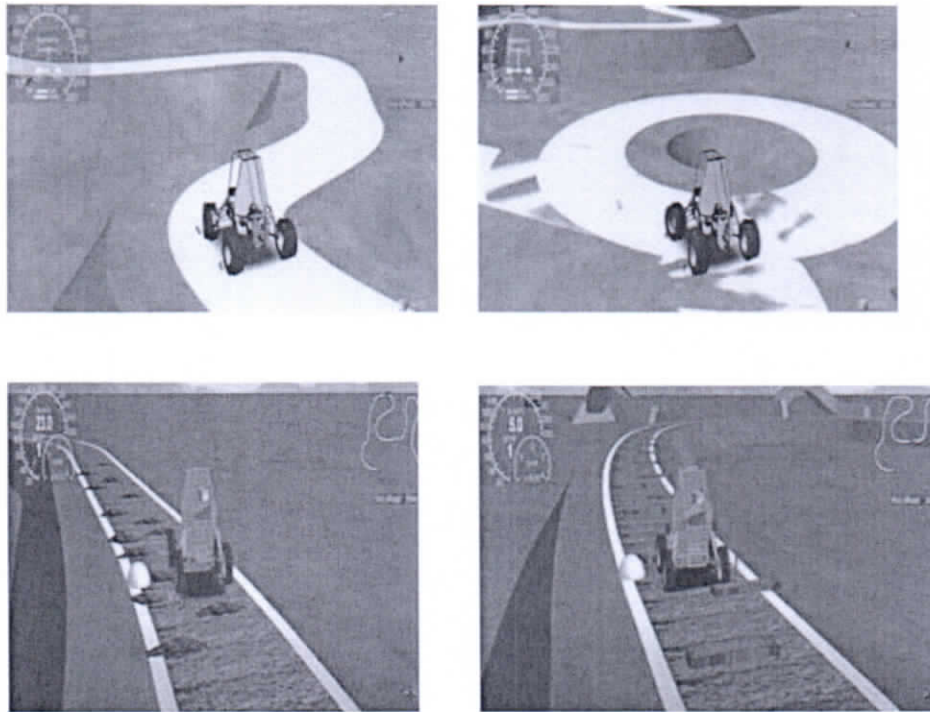


Figure 4 IPG Car Maker Simulation test ride for Endurance



Electric Two-Wheeler Design Challenge:

ETWDC is an event organised by SAEINDIA Southern Section. A total of 10 students from Mechanical and Electrical and Electronics Engineering with two faculty advisors are participated in this event from Aditya College of Engineering & Technology. Due to pandemic situation, the event is restricted to online only. In this event, three phases of Design report-1, Design report-2 and static event-business plan.

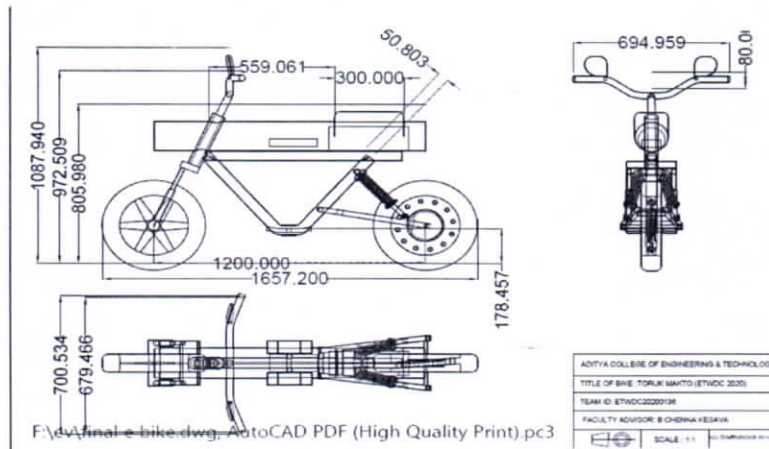


Figure 5 Master layout of Electric bike

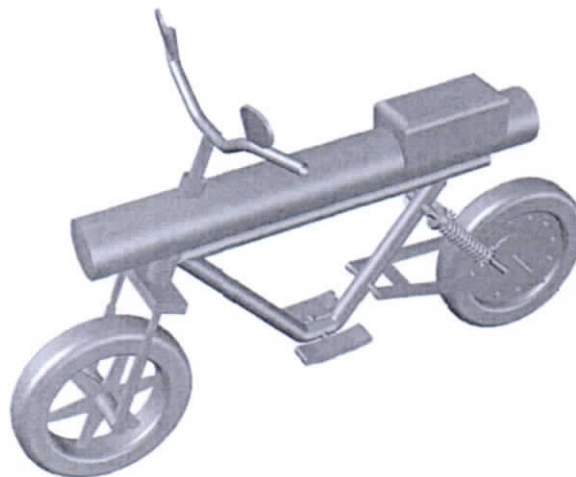


Figure 6 3D model of the designed vehicle

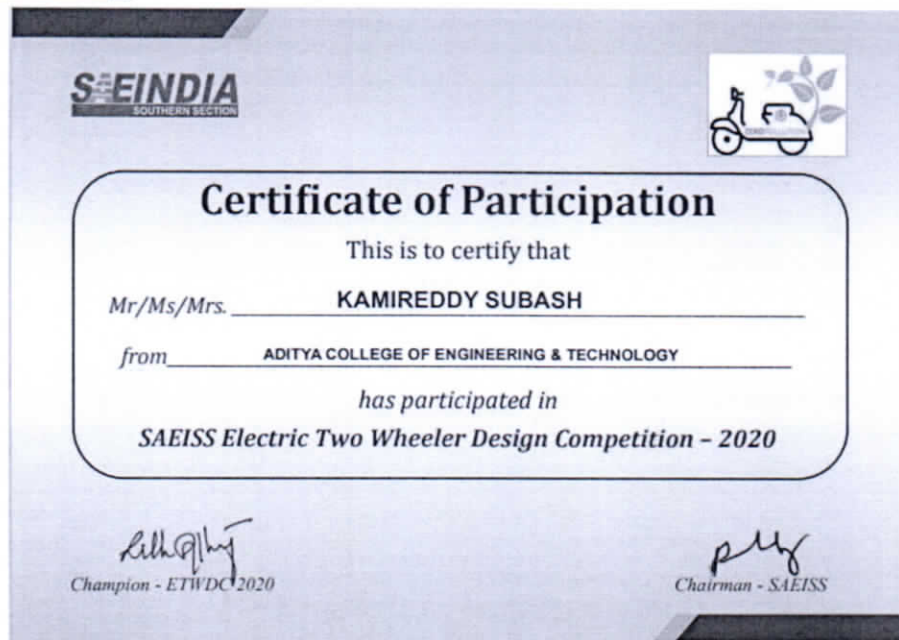


Figure 7 Student Participation certificate

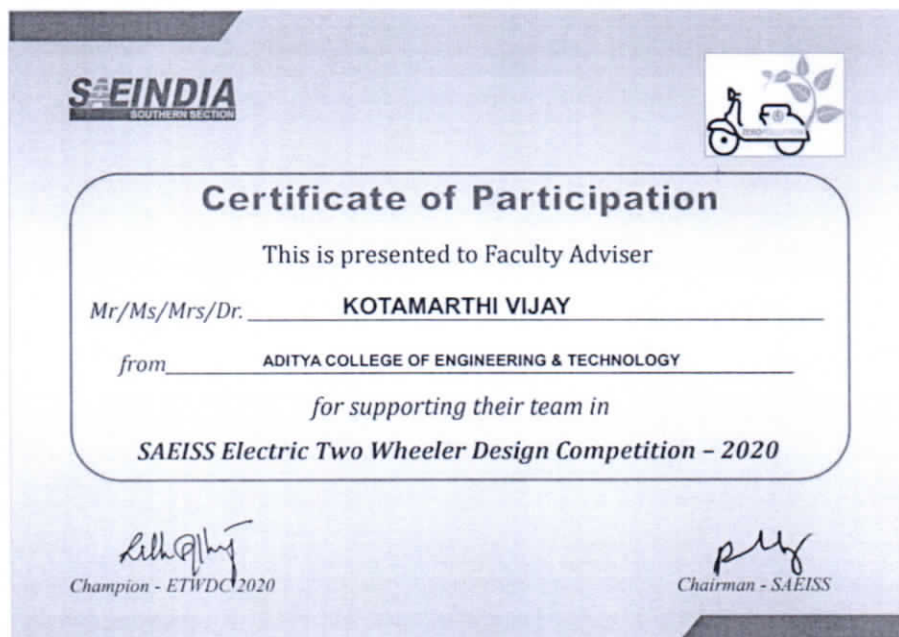


Figure 8 Faculty advisor participation certificate

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Hands on experience on automotive:

Automobile club students are encouraged to participate in automotive hands on experience as part of skill development program



Figure 9 Explanation of the Bus chassis and parts



Figure 10 Differential gear box



Figure 11 Differential gear box



Figure 12 Two wheeler bike parts

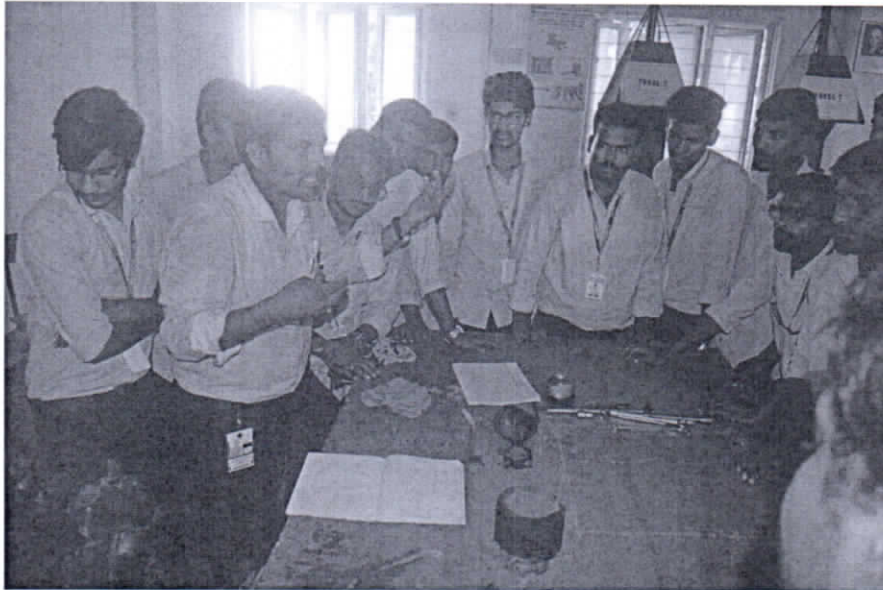


Figure 13 Two-wheeler engine components



Figure 14 Assembly of engine components

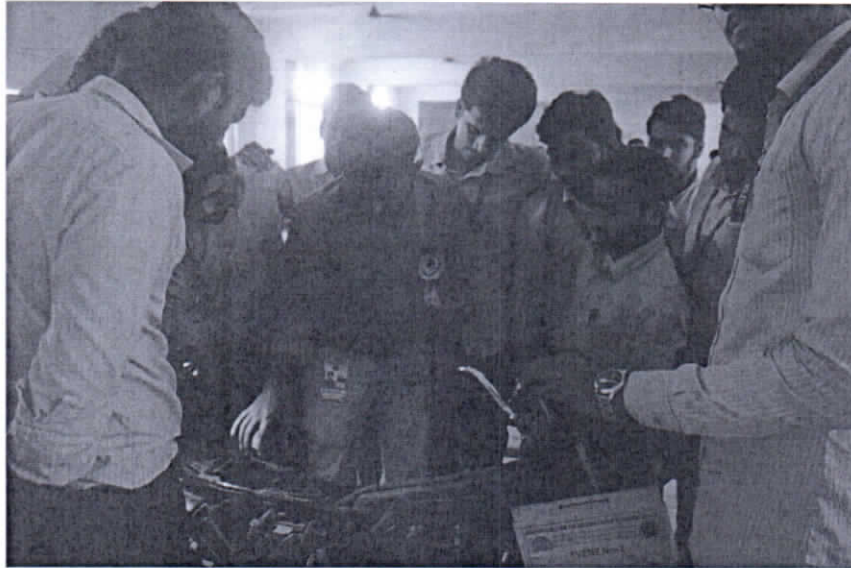


Figure 15 Bike chassis explanation

Electric Solar Vehicle:

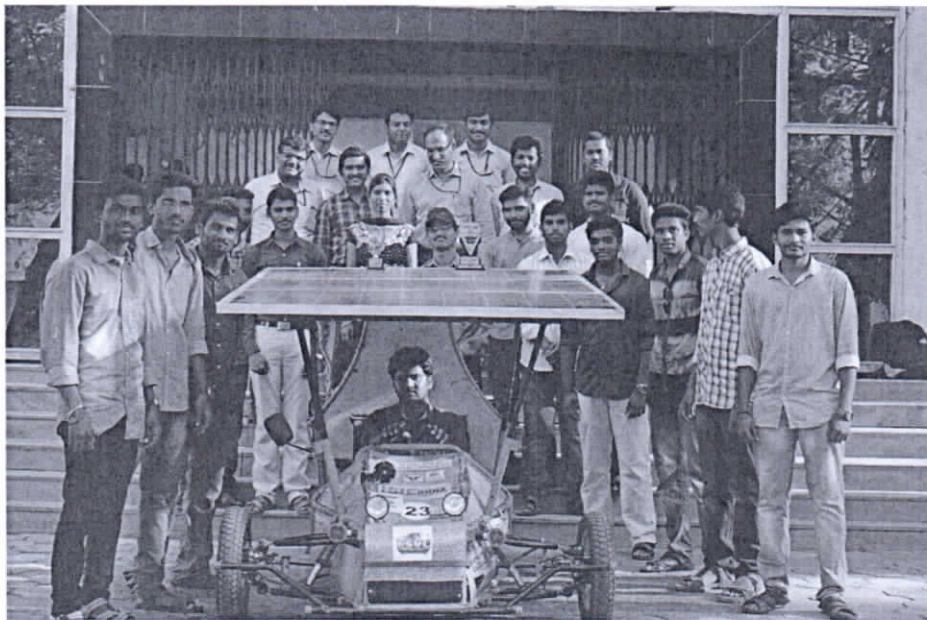


Figure 16 Appreciation from Principal

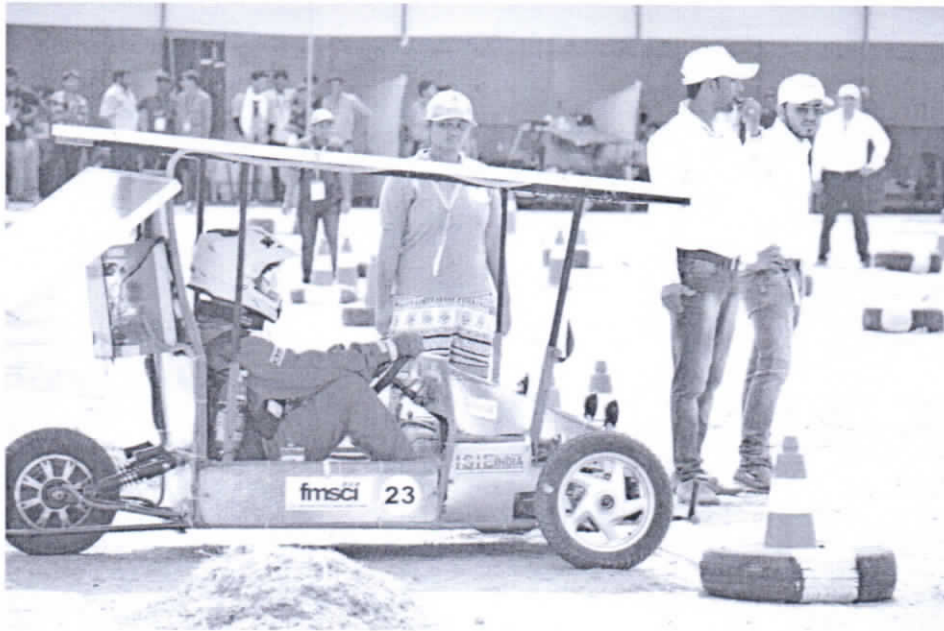


Figure 17 Acceleration test at ESVC – ISIE



Figure 18 Appreciation from Aditya Educational Group Chairman Sri N Sessa Reddy



Training Programmes

Training programmes such as AUTOCAD, CNC, Python and Computer based training (Solid edge) etc. were conducted to develop technical skills in the students suitable for placements.

