



SASURIE COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai

Near NH544, Coimbatore Bypass, Near Vijayamangalam Tollgate, Tirupur 638056

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION - 2

TEACHING, LEARNING & EVALUATION

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

SASURIE COLLEGE OF ENGINEERING



Criteria 2	Teaching – Learning and Evaluation	350
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Key Indicator – 2.3. Teaching – Learning Process (40)

2022 – 2023

ELECTRICAL AND ELECTRONICS ENGINEERING

PROBLEM SOLVING

Activity	Number of Students attended	Page No.
Tutorial	05	03
Project	04	09
TOTAL STUDENTS ATTENDED	09	-

Criteria 2	Teaching – Learning and Evaluation	350
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Key Indicator – 2.3. Teaching – Learning Process (40)

2022 – 2023

ELECTRICAL AND ELECTRONICS ENGINEERING

PROBLEM SOLVING

TUTORIAL

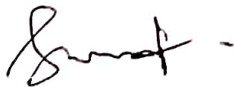
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR(2022-2023)

PROBLEM SOLVING METHOD

LIST OF STUDENTS II YEAR EEE PROBLEM SOLVING METHOD

S.NO	REG.NO	NAME	YEAR/SEM	LEARNING METHOD
1	732421105302	RAGUL.M.E	II/III	PROBLEM SOLVING METHOD TUTORIAL- EE3303- ELECTRICAL MACHINES-I



Name and Signature of the Faculty Incharge



HOD/EEE


Dr.M.VIJAYAKUMAR M.E., Ph.D.
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 050, Tirupur (Dt).

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Tutorial Answer Sheet

Name of the Student : RAGUL . M . E

AU Register Number: 73241105302

Tutorial – 02			Date of Issue:	15.10.22	Marks	10
Course code	EE3303	Course Title	ELECTRICAL MACHINES-I			
Year	II	Semester/Section	III	Date of Submission:	22.10.22	

Q.No	Questions	CO
1	A DC generator has an EMF of 100 V, when the useful flux per pole is 20 mWb and the speed is 800 rpm. Calculate the generated EMF (1) with same flux and a speed of 1000 rpm; (2) with a flux per pole of 24 mWb and a speed of 940 rpm.	CO1
2	The armature resistance of a 200 V DC shunt motor is 0.12 Ω . It runs at 600 rpm at constant torque load and draws a current of 21 A. Calculate its new speed if the field current is reduced to 10%.	CO2
3	A 5 kVA distribution transformer has a full load efficiency of 90 % at which copper loss equals Iron loss. The transformer is loaded 24 hours as given below. No load for 9 hours, 25% of full load for 6 hours, 50% of full load for 6 hours, and full load for 3 hours. Calculate all day efficiency of the Transformer.	CO2

Mark Allocation

Rubrics	Marks Allocated	Marks obtained
Problem solving approach	6	5
Correctness of Answer	2	1
Timely submission	2	2
Total marks	10	8



Name and Signature of the Faculty Incharge



HOD/EEE


Dr.M.VIJAYAKUMAR ME., Ph.D.,

PRINCIPAL



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 Vijayamangalam - 638 056, Tirupur (Dt).

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR (2022-2023)

PROBLEM SOLVING METHOD

LIST OF STUDENTS IV YEAR EEE PROBLEM SOLVING METHOD

S.NO	REGNO	NAME	YEAR/SEM	LEARNING METHOD
1	732419105001	AJITHKUMAR.S	IV/VII	PROBLEM SOLVING METHOD TUTORIAL- EE 8703- RENEWABLE ENERGY SYSTEMS
2	732419105002	DINESH.M	IV/VII	
3	732419105004	NAVEEN KUMAR. A	IV/VII	
4	732419105005	PRAVEENKUMAR.M	IV/VII	

P. Lakshminarayanan

Name and Signature of the Faculty Incharge

[Signature]

HOD/EEE

[Signature]
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Tutorial Answer Sheet

Name of the Student : Praveenkumar M.

AU Register Number: 732419105005

Tutorial – 02			Date of Issue:	12.12.22	Marks	10
Course code	EE 8703	Course Title	RENEWABLE ENERGY SYSTEMS			
Year	IV	Semester/Section	VII	Date of Submission:	19.12.22	

Q.No	Questions	CO
1	In a particular site, the atmospheric pressure is 1.01325 bar and temperature is 25°C. The wind is available at 9 m/sec. Evaluate the following : (i) Power density available in the site (ii) Maximum Power density possible (iii) Obtainable power density assuming the over all efficiency is 35% (iv) Power density of the windmill if the diameter is 50 m and (v) Axial thrust force action on the wind mill blade.	CO1
2	A photovoltaic cell has some open circuit voltage of 1.0 Volts and a short circuit current of 260 A/m ² , at a cell temperature at 28°C. Calculate the voltage and current density that maximizes the power of the cell. Estimate the corresponding maximum power output per unit cell area? If the solar radiation falling on the cell is 900 W/m ² , and the cell size is 25 cm x 25 cm, compute the instantaneous conversion efficiency of the cell? And give the value of Fill factor of cell.	CO2
3	Design a Stand-alone solar PV for an emergency 24 hours x 7 days clinic room. The following data were observed during the operation hours. The clinic has 10 tube lights, 5 Fans, 2 PC with 200 Watts, 1 Water cooler with 750 watts. Assume the average solar radiation available in Vellore is 800 W/m ² . Estimate and form array the battery and module requirements.	CO2


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Mark Allocation

Rubrics	Marks Allocated	Marks obtained
Problem solving approach	6	5
Correctness of Answer	2	2
Timely submission	2	1
Total marks	10	8

P. Lakshmi Prayee

Name and Signature of the Faculty Incharge



HOD/EEE



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Criteria 2	Teaching-Learning and Evaluation	350
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Key Indicator- 2.3. Teaching- Learning Process (40)

2022-2023

**ELECTRICAL AND ELECTRONICS
ENGINEERING**

PROBLEM SOLVING

PROJECT

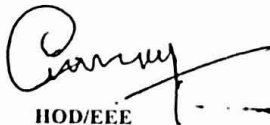
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


LIST OF STUDENTS-IV YEAR EEE -PROBLEM SOLVING METHOD

ACADEMIC YEAR 2022-23

BATCH NO	REG NO	NAME	PROJECT TITLE	PROJECT SUPERVISOR
I	732419105001	AJITHKUMAR S	E-VEHICLE WIRELESS CHARGING SYSTEM COMPACTABLE WITH VARIABLE VOLTAGE	Mr.P.SUDARSAN
	732419105002	DINESH.M		
	732419105003	NAVEENKUMAR.A		
	732419105004	PRAVEENKUMAR.M		



PROJECT CO-ORDINATOR


HOD/EEE

 Head, Dept. Of EEE
SASURIE
College of Engineering


PRINCIPAL

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SASURIE COLLEGE OF ENGINEERING
Vijayamangalam - 638 056, Tirupur (Dt).


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**E-VEHICLE WIRELESS CHARGING SYSTEM
COMPACTABLE WITH VARIABLE VOLTAGE**



A PROJECT REPORT

Submitted by

AJITH KUMAR. S	(732419105001)
DINESH.M	(732419105002)
NAVEEN KUMAR.A	(732419105003)
PRAVEEN KUMAR.M	(732419105004)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

ELECTRICAL AND ELECTRONICS ENGINEERING

SASURIE COLLEGE OF ENGINEERING

VIJAYAMANGALAM-638056

ANNA UNIVERSITY:CHENNAI 600 025

MAY 2023



Dr.M.VIJAYAKUMAR ME., Ph.D.,
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Vijayamangalam - 638 056, Tirupur (Dt).

ANNA UNIVERSITY::CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report titled "E-VEHICLE WIRELESS CHARGING SYSTEM COMPACTABLE WITH VARIABLE VOLTAGE" is the bonafide work S.AJITH KUMAR, M.DINESH, A.NAVEEN KUMAR, M.PRAVEEN KUMAR, who carried out the project work under my supervision.


13/5/23

SUPERVISOR

Mr.P.SUDARSAN M.E.,

Associate Professor.

Department of EEE.

Sasurie College of Engineering.

Tiruppur-638 056


13/5/23

HEAD OF THE DEPARTMENT

Mr.P.KARTHIKEYAN M.E., M.B.A .,

Head of Department .

Department of EEE.


Sasurie College of Engineering.

Tiruppur-638 056

Submitted for the University Viva-Voce examination held on 18.5.23.


13/5/23
INTERNAL EXAMINER


18.05.2023
EXTERNAL EXAMINER


Dr.M.VIJAYAKUMAR M.E., Ph.D.,
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ANNA UNIVERSITY :: CHENNAI - 600 025
OFFICE OF THE CONTROLLER OF EXAMINATIONS
Assessment Details Entered
APRIL / MAY EXAMINATION, 2023 - EXAMINATIONS

Inst Code & Name : 7324 - SASURIE COLLEGE OF ENGINEERING

Branch Code / Name : 105 : B.E. Electrical and Electronics Engineering University : AUC
Semester : 08

Register No	Name of the Student	Subjects	Attend hr 1	Total hr 1	Attend hr 2	Total hr 2	IM 2	Attend hr 3	Total hr 3	IM 3	Attend hr 4	Total hr 4	IM 4
732419105001	AJITH KUMAR S	EE8811									250	300	92
		GE8073	12	16	10	14	60	12	14	88	14	16	90
		GE8076	12	16	10	16	52	14	14	92	16	16	85
732419105002	DINESH M	EE8811									265	300	94
		GE8073	12	16	14	14	68	14	14	85	16	16	74
		GE8076	12	16	12	16	56	14	14	80	16	16	80
732419105004	NAVEENKUMAR A	EE8811									250	300	85
		GE8073	10	16	12	14	50	12	14	50	14	16	68
		GE8076	10	16	12	16	40	14	14	82	16	16	82
732419105005	PRAVEEN KUMAR M	EE8811									265	300	88
		GE8073	10	16	14	14	50	14	14	64	16	16	68
		GE8076	10	16	12	16	52	13	14	84	15	16	84


Dr. M. VIJAYAKUMAR M.E., Ph.D.,
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