



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 - 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

SASURIE COLLEGE OF ENGINEERING



1.2 Academic Flexibility(30)

1.2.1 Number of Value Added/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Value Added/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	Electrical Safety in Engineering				
Resource Person:	R.Gopal, Manager, Caliber Embedded Technologies , Salem-636009		Mr.M.Parthiban, CEO, Caliber Embedded Technologies, Salem-636009		
Date of conduct from:	22.08.2022	To:	26.08.2022	Duration:	30Hours
Organized Department:	ELECTRONICS AND COMMUNICATION ENGINEERING				
Participant Year:	2/3/4	Semester:	ODD	No. of Students Registered:	26
Venue:	SEMINAR HALL-ECE				

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SASURIE
COLLEGE OF ENGINEERING
Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

Ref: SCE / CSE / Students / VAC / 2022 – 2023 / ODD

16.08.2022

CIRCULAR

In order to bridge the curricular gap between the Academic Syllabus and Industry requirements, Department of Electronics and Communication Engineering and IQAC of our Institution in association with **Caliber Embedded Technologies**, is organizing a **Value Added Course (VAC)** for the students of II, III and IV year of ECE, EEE, MECH and CIVIL on the title “**Electrical Safety in Engineering**” from 22.08.2022 to 26.08.2022. At the end of the VAC, course completion certificates will be issued to the eligible participants as per the following norms.

- Students, who are securing more than 70% on total score in the VAC test and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended.

Resource Person Details	R.Gopal, Manager, Caliber Embedded Technologies , Salem-636009	Mr.M.Parthiban, CEO, Caliber Embedded Technologies, Salem-636009
Venue	SEMINAR HALL-ECE	


HoD/ECE


PRINCIPAL

Copy to:

1. Chairman & Secretary for information
2. Principal office
3. IQAC Co-Ordinator
4. Class In charges - II, III & IV-Year ECE, EEE, MECH and CIVIL
5. II, III & IV-Year ECE, EEE, MECH and CIVIL Students
6. ECE, EEE, MECH and CIVIL Notice Board
7. Department File


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



SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 609 003, Tiruppur (TN).



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

Ref: SCE / CSE / Students / VAC / 2022 - 2023 / ODD

16.08.2022

SYLLABUS - VALUE ADDED COURSE

“Electrical Safety in Engineering”

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 -2023 / ODD

S.No.	Topics Covered	Duration (In Hours)	Date
1	Introduction to Electrical Safety	3	22.08.2022
2	Regulatory Framework and Standards	3	22.08.2022
3	Risk Assessment and Management	3	23.08.2022
4	Lockout-Tagout (LOTO) Procedures	3	23.08.2022
5	Personal Protective Equipment (PPE)	3	24.08.2022
6	Safe Work Practices	3	24.08.2022
7	Electrical Equipment Inspection and Maintenance	3	25.08.2022
8	Grounding and Bonding	3	25.08.2022
9	Electrical Hazards and Mitigation	3	26.08.2022
10	Emergency Response and First Aid	3	26.08.2022
Total Hours		30	-

After successful completion of 30 hours VAC, the assessment test for the VAC titled Electrical Safety in Engineering will be conducted on 26.08.2022.

V. Sreejith
VAC Coordinator

[Signature]
HoD/ECE

[Signature]
Dr.M.VINAYAKUMAR ME., Ph.D.,
PRINCIPAL



SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 955, Tirupur (Dt).



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

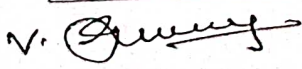
“Electrical Safety in Engineering”

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 -2023 / ODD

S.No.	Reg No.	Name of the Student	Year / Branch
1.	732421106001	GOKULS	II/ECE
2.	732421106002	ROGESH.P	II/ECE
3.	732421106003	SABARI JOTHIS	II/ECE
4.	732419106001	FEMEY S	IV/ECF
5.	732419106003	MOWNEESH N	IV/ECE
6.	732419106004	SARANYA DEVI V	IV/ECE
7.	732419106005	UMESH KUMAR S	IV/ECE
8.	732419106006	YOGESH S	IV/ECE
9.	732419106301	KAVIYA PRIYA G	IV/ECE
10.	732419106302	VIVEK S M	IV/ECE
11.	732421105301	PRAVEENKUMAR M	II/EEE
12.	732421105302	RAGUL.M.E	II/EEE
13.	732419105001	AJITH KUMAR S	IV/EEE
14.	732419105002	DINESH M	IV/EEE
15.	732419105004	NAVEENKUMAR A	IV/EEE
16.	732419105005	PRAVEEN KUMAR M	IV/EEE
17.	732420114301	HARI GANESH B	III/MECH
18.	732420114302	PREMKUMAR Y	III/MECH
19.	732419114001	AMULRAJ P	IV/MECH
20.	732419114002	ARUNKUMAR B	IV/MECH
21.	732419114003	KAVIKRISHNAN P	IV/MECH
22.	732419114004	KISHORE B	IV/MECH
23.	732419114006	PAVENDHAR S	IV/MECH
24.	732419114007	PRIYADHARSHAN G	IV/MECH
25.	732419114008	SELVENTHIRAN S	IV/MECH
26.	732419114010	THIRUNAVUKKARASU S	IV/MECH

V. 
VAC Coordinator


HOD/ECE

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



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

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

“Electrical Safety in Engineering”

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 - 2023/ ODD

S.No	Reg No.	Name of the Student	Year/ Branch	22.08.2022		23.08.2022		24.08.2022		25.08.2022		26.08.2022		No. of Hours Attended	Signature of the Student
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1.	732421106001	GOKUL S	II/ECE	/	/	/	/	/	/	/	/	/	/	30	Gokul S.
2.	732421106002	ROGESH.P	II/ECE	/	/	A	/	/	/	/	/	/	/	27	R. Rogesh P.
3.	732421106003	SABARI JOTHIS	II/ECE	/	/	/	/	/	/	/	/	/	/	30	S. Sabari J.
4.	732419106001	FEMEY S	IV/ECE	/	/	/	/	/	/	/	/	/	/	30	S. Femeys
5.	732419106003	MOWNEESH N	IV/ECE	/	/	/	/	/	/	/	/	/	/	30	N. Mowneesh
6.	732419106004	SARANYA DEVI V	IV/ECE	/	/	/	A	/	/	/	/	/	/	27	V. Saranya D.
7.	732419106005	UMESH KUMAR S	IV/ECE	/	/	A	A	/	/	/	/	/	/	24	S. Umesh K.
8.	732419106006	YOGESH S	IV/ECE	/	/	/	/	/	A	/	/	/	/	27	S. Yogesh S.
9.	732419106301	KAVIYA PRIYA G	IV/ECE	/	/	/	/	/	/	/	/	/	/	30	G. Kaviya P.
10.	732419106302	VIVEK S M	IV/ECE	/	/	/	/	/	A	/	/	/	/	27	M. Vivek S.
11.	732421105301	PRAVEENKUMAR M	II/EEE	/	/	/	/	/	/	/	/	/	/	30	M. Praveen K.
12.	732421105302	RAGUL M.E	II/EEE	/	/	A	A	/	/	/	/	/	24	E. Ragul M.	

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



SASURIE COLLEGE OF ENGINEERING.
Vijayamangalam - 636 056, Tirupur (Dt).

STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/ Branch	22.08.2022		23.08.2022		24.08.2022		25.08.2022		26.08.2022		No. of Hours Attended	Signature of the Student
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
13.	732419105001	AJITH KUMAR S	IV/EEE	/	/	/	/	/	/	A	/	/	/	27	S. Praveen
14.	732419105002	DINESH M	IV/EEE	/	/	/	/	/	/	/	/	/	/	30	H. D.
15.	732419105004	NAVEENKUMAR A	IV/EEE	/	/	/	/	/	/	A	/	/	/	27	A. D. Praveen
16.	732419105005	PRAVEEN KUMAR M	IV/EEE	/	/	/	/	A	A	/	/	/	/	24	M. Praveen
17.	732420114301	HARI GANESH B	III/MECH	/	/	A	/	/	/	/	/	/	/	27	B. Praveen
18.	732420114302	PREMKUMAR Y	III/MECH	/	/	/	/	/	/	/	/	/	/	30	Y. Praveen
19.	732419114001	AMULRAJ P	IV/MECH	/	/	A	/	/	/	/	/	/	/	27	P. Praveen
20.	732419114002	ARUNKUMAR B	IV/MECH	/	/	/	/	/	/	/	/	/	/	30	B. Praveen
21.	732419114003	KAVIKRISHNAN P	IV/MECH	/	/	/	/	/	/	/	/	/	/	30	P. Praveen
22.	732419114004	KISHORE B	IV/MECH	/	/	/	/	/	/	/	/	/	/	30	K. Praveen
23.	732419114006	PAVENDHAR S	IV/MECH	/	/	A	/	/	/	/	/	/	/	27	S. Praveen
24.	732419114007	PRIYADHARSHAN G	IV/MECH	/	/	A	A	/	/	/	/	/	/	24	G. Praveen
25.	732419114008	SELVENTHIRAN S	IV/MECH	/	/	A	/	/	/	/	/	/	/	27	S. Praveen
26.	732419114010	THIRUNAVUKKARASU S	IV/MECH	/	/	/	/	/	/	/	/	/	/	30	T. Praveen

V. Praveen
VAC Coordinator

HOD/ECE


Dr. M. VIJAYAKUMAR ME., Ph.D.,
 PRINCIPAL
 SASURIE COLLEGE OF ENGINEERING,
 Vijayamangalam - 630 056, Tirupur (Dt).



Report on Value Added Course

Title:	Electrical Safety in Engineering		
Resource Person:	Mr.G.Vijayan, Trainer, Caliber Embedded Technologies , Salem-636009	Mr.K.Ranganathan, Trainer, Caliber Embedded Technologies , Salem-636009	
Date of conduct from :	22.08.2022	To:	26.08.2022
		Duration:	30 Hours
Organized by :	ELECTRONICS AND COMMUNICATION ENGINEERING and IQAC in association with Caliber Embedded Technologies		
Academic Year:	2022 - 2023	Semester:	ODD
Participant Year:	II, III, IV Year - ECE, EEE, MECH and CIVIL	No. of Students Participated :	26
Venue:	SEMINAR HALL-ECE		

Outcome of Value Added Course (VAC)

At the end of the Course, Students can be able to

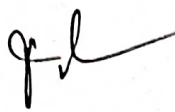
- Demonstrate a comprehensive understanding of fundamental electrical safety principles and their application in engineering contexts.
- Acquire the skills to conduct risk assessments, identify potential electrical hazards, and develop effective risk management strategies in real-world engineering scenarios.
- Capable of using, and maintaining appropriate PPE for electrical tasks, promoting a safe working environment.
- Demonstrate proficiency in Lockout Tagout (LOTO) procedures.
- Identify various electrical hazards and implement effective mitigation strategies.

Assessment Process

- Students, who are securing **more than 70% on total score in the VAC test** and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended
- Total Score = $(0.5 * \text{Attendance in VAC out of 100 percentage} + 0.5 * \text{Test mark in VAC out of 100 marks})$

No. of students successfully completed the VAC course is 26 Students based on the above assessment process.


VAC Co-ordinator


HoD/ ECE


Principal

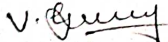

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING


Certificate of Participation

This is to certify that Mr./Ms NAVEENKUMAR A.IV/EEE has successfully completed the Value Added Course titled "Electrical Safety In Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Caliber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

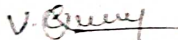
 **Dr.M.VIJAYAKUMAR** M.E., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Certificate of Participation

This is to certify that Mr./Ms **ROGESH.P.II/ECE** has successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Caliber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

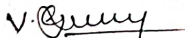

Dr.M.VIJAYAKUMAR ME., Ph.D.
PRINCIPAL
 **SASURIE COLLEGE OF ENGINEERING,**
Vijayamangalam - 638 066, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./MsGOKULS,II/ECE..... has successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the *Department of Electronics and Communication Engineering* in association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

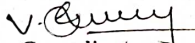

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms FEMEY S.IV/ECE has
successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the
Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of
Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

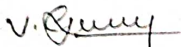

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING


Certificate of Participation

This is to certify that Mr./Ms MOWNEESH N,IV/ECE has successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal


Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 633 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms RAGUL.M.E./H/EEE has successfully completed the Value Added Course titled "Electrical Safety In Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).

V. *[Signature]*
Co-ordinator

[Signature]
Head of the Department

[Signature]
Principal

[Signature]
Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING


Certificate of Participation

This is to certify that Mr/Ms PRAVEENKUMAR M.H.P.P. has
successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the
Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of
Engineering and Calliber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Coordinator


Head of the Department


Principal

 Dr.M.VIJAYAKUMAR M.E., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayanagaram - 655 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING


Certificate of Participation

This is to certify that Mr./Ms AJITH KUMAR S,IV/EEE has successfully completed the Value Added Course titled "Electrical Safety In Engineering" Organized by the Department of Electronics and Communication Engineering In association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

 **Dr.M.VIJAYAKUMAR** ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms **PREMKUMAR Y,III/MECH** has successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal



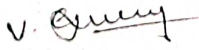
me
Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms HARI GANESH B,III/MECH has successfully completed the Value Added Course titled "Electrical Safety In Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal


Dr.M.VIJAYAKUMAR ME., Ph.D.
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 058, Tirupur (Dt).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr/Ms ANILRAJ P/IV/MECH has
successfully completed the Value Added Course titled "Electrical Safety In Engineering" Organized by the
Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of
Engineering and Callber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

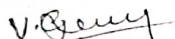

Dr.M.VIJAYAKUMAR, M.E., Ph.D.
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Tn).



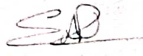
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Participation

This is to certify that Mr./Ms KAVIKRISHNAN P,IV/MECH has successfully completed the Value Added Course titled "Electrical Safety in Engineering" Organized by the Department of Electronics and Communication Engineering in association with IQAC of Sasurie College of Engineering and Caliber Embedded Technologies from 22-08-2022 to 26-08-2022 (5 Days).


Co-ordinator


Head of the Department


Principal

Me
Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
 **SASURIE COLLEGE OF ENGINEERING,**
Vijayamangalam - 638 056, Tirupur (Dt).



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

DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

TEST QUESTION PAPER - VALUE ADDED COURSE

“Electrical Safety in Engineering”

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 -2023 / ODD

Date of Test : 26.08.2022

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

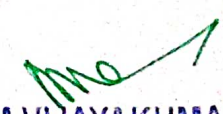
Name of the Student:

Year/Sem:

AU Register Number:

Answer all the questions:

1. What is the primary purpose of electrical safety in engineering?
 - a. Increase energy efficiency
 - b. Prevent electrical fires
 - c. Enhance equipment performance
 - d. Reduce electrical costs
2. What is the standard color coding for indicating a ground wire in electrical systems?
 - a. Red
 - b. Blue
 - c. Green
 - d. Yellow
3. What is the minimum recommended distance from power lines for personnel working with equipment or tools?
 - a. 3 feet
 - b. 5 feet
 - c. 10 feet
 - d. 15 feet
4. In electrical safety, what does PPE stand for?
 - a. Personal Property Equipment
 - b. Proper Power Enhancement
 - c. Personal Protective Equipment
 - d. Power Plant Efficiency


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5. Which of the following is an example of electrical overcurrent protection device?
 - a. Fuse
 - b. Switch
 - c. Capacitor
 - d. Resistor

6. What does the term "arc flash" refer to in electrical safety?
 - a. A sudden power outage
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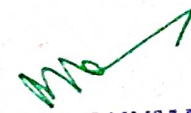

7. What is the purpose of a Lockout/Tagout (LOTO) procedure in electrical safety?
 - a. To secure equipment during transportation
 - b. To prevent accidental equipment start-up during maintenance
 - c. To enhance equipment performance
 - d. To reduce energy consumption

8. Which class of fire extinguisher is suitable for electrical fires?
 - a. Class A
 - b. Class B
 - c. Class C
 - d. Class D

9. What is the primary function of a Ground Fault Circuit Interrupter (GFCI)?
 - a. To regulate voltage in a circuit
 - b. To prevent overloading of circuits
 - c. To protect against electric shock
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10. What precaution should be taken before working on electrical equipment?
 - a. Wear non-conductive shoes
 - b. Remove all personal protective equipment
 - c. Work alone to avoid distractions
 - d. Avoid checking for live wires

11. What is the purpose of an electrical safety audit?
 - a. To increase energy consumption
 - b. To identify and rectify potential electrical hazards
 - c. To reduce equipment performance
 - d. To promote electrical fires


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19. What does the term "LOTO" stand for in electrical safety?
- Lockout Tagout
 - Limited Overload Timeout
 - Low-voltage Operation
 - Load Transfer Override
20. Which color is commonly used for electrical hazard warning signs?
- Blue
 - Yellow
 - Green
 - Red
21. What does the acronym PPE stand for in the context of electrical safety?
- Personal Protection Equipment
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 - Protective Power Electronics
22. What should you do before working on electrical equipment to ensure safety?
- Wear sunglasses
 - Check for proper ventilation
 - Perform a risk assessment
 - Consult with colleagues
23. What does the term "AFCI" stand for in electrical safety?
- Advanced Frequency Circuit Interrupter
 - Automatic Fault Current Interrupter
 - Arc Fault Circuit Interrupter
 - Amperage Flow Control Interface
24. Which of the following materials is a poor conductor of electricity?
- Copper
 - Aluminum
 - Rubber
 - Silver
25. What is the purpose of a "kill switch" in electrical safety?
- To increase power
 - To terminate electrical circuits in an emergency
 - To regulate voltage
 - To control frequency



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

TEST QUESTION ANSWER KEY - VALUE ADDED COURSE

“Electrical Safety in Engineering”

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 -2023 / ODD

Date of Test : 26.08.2022

1	b	6	b	11	b	16	c	21	a
2	c	7	b	12	a	17	a	22	c
3	c	8	c	13	c	18	c	23	c
4	c	9	c	14	b	19	a	24	c
5	a	10	a	15	b	20	d	25	b

V. Omay
VAC Coordinator



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING

TEST QUESTION PAPER - VALUE ADDED COURSE

"Electrical Safety in Engineering"

From 22.08.2022 to 26.08.2022 (5 days)

Duration : 30 Hours

Academic Year : 2022 -2023 / ODD

Date of Test : 26.08.2022

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student: **FEMEY.S**

Year/Sem: **IV / VI**

AU Register Number: **732419106001**

Answer all the questions:

1. What is the primary purpose of electrical safety in engineering?
a. Increase energy efficiency
 b. Prevent electrical fires
c. Enhance equipment performance
d. Reduce electrical costs
2. What is the standard color coding for indicating a ground wire in electrical systems?
a. Red
 b. Blue
c. Green
d. Yellow
3. What is the minimum recommended distance from power lines for personnel working with equipment or tools?
a. 3 feet
b. 5 feet
c. 10 feet
 d. 15 feet
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[Signature]
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12. Which type of electrical shock occurs when the body becomes part of the electrical circuit?
- a. Direct shock
 - b. Indirect shock
 - c. Ground fault shock
 - d. Arc flash shock
13. What is the recommended approach when handling damaged electrical cords?
- a. Tape the damaged area
 - b. Use the cord as is, but with caution
 - c. Replace the cord immediately
 - d. Ignore the damage if it's minor
14. What is the purpose of an electrical safety barrier?
- a. To increase visibility of electrical equipment
 - b. To restrict access to hazardous areas
 - c. To enhance electrical conductivity
 - d. To reduce the lifespan of electrical equipment
15. What does the term "step potential" refer to in electrical safety?
- a. The voltage difference between two points on a person's body
 - b. The potential difference between the feet when standing on the ground
 - c. The potential difference between two electrical devices
 - d. The voltage drop across a resistor
16. How often should electrical equipment be inspected for safety?
- a. Once a year
 - b. Only when malfunctions occur
 - c. Regularly, as part of a maintenance schedule
 - d. Every five years
17. Which of the following is a common cause of electrical fires?
- a. Overloading circuits
 - b. Proper grounding
 - c. Regular equipment inspections
 - d. Using high-quality electrical components
18. What is the purpose of a voltage tester?
- a. To increase voltage in a circuit
 - b. To measure the flow of current
 - c. To detect the presence of voltage
 - d. To regulate electrical resistance

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ASSESSMENT SHEET - VALUE ADDED COURSE

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S.No	Reg No.	Name of the Student	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL Score (100) (50% of A + 50% of B)
				No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	
1.	732421106001	GOKUL S	II/ECE	30	100	21	84	92
2.	732421106002	ROGESH P	II/ECE	27	90	19	76	83
3.	732421106003	SABARI JOTHIS	II/ECE	30	100	19	76	88
4.	732419106001	FEMEY S	IV/ECE	30	100	19	76	88
5.	732419106003	MOWNEESH N	IV/ECE	30	100	21	84	92
6.	732419106004	SARANYA DEVI V	IV/ECE	27	90	21	84	87
7.	732419106005	UMESH KUMAR S	IV/ECE	24	80	20	80	80
8.	732419106006	YOGESH S	IV/ECE	27	90	21	84	87
9.	732419106301	KAVIYA PRIYA G	IV/ECE	30	100	20	80	90
10.	732419106302	VIVEK S M	IV/ECE	27	90	19	76	83
11.	732421105301	PRAVEENKUMAR M	II/EEE	30	100	19	76	88
12.	732421105302	RAGUL M E	II/EEE	24	80	20	80	80

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				No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	
13.	732419105001	AJITH KUMAR S	IV/EEE	27	90	19	76	83
14.	732419105002	DINESH M	IV/EEE	30	100	20	80	90
15.	732419105004	NAVEENKUMAR A	IV/EEE	27	90	19	76	83
16.	732419105005	PRAVEEN KUMAR M	IV/EEE	24	80	21	84	82
17.	732420114301	HARI GANESH B	III/MECH	27	90	20	80	85
18.	732420114302	PREMKUMAR Y	III/MECH	30	100	21	84	92
19.	732419114001	AMULRAJ P	IV/MECH	27	90	20	80	85
20.	732419114002	ARUNKUMAR B	IV/MECH	30	100	19	76	88
21.	732419114003	KAVIKRISHNAN P	IV/MECH	30	100	20	80	90
22.	732419114004	KISHORE B	IV/MECH	30	100	21	84	92
23.	732419114006	PAVENDHAR S	IV/MECH	27	90	21	84	87
24.	732419114007	PRIYADHARSHAN G	IV/MECH	24	80	20	80	80
25.	732419114008	SELVENTHIRAN S	IV/MECH	27	90	21	84	87
26.	732419114010	THIRUNAVUKKARASU S	IV/MECH	30	100	20	80	90


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