

STUDENTS FEEDBACK ON CURRICULUM

This questionnaire is to collect information relating to your satisfaction towards curriculum for creating conducive atmosphere for teaching and learning. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	EEE
Name of the Student	Kaifu
USN	15913 EEE 025

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?		✓			
2	How do you rate the allocation of the credits to the courses?		✓			
3	Relevance for implementation in projects		✓			
4	How do you rate the electives offered in relation to the technological advancements?	✓				
5	How do you rate the evaluation scheme designed for each of the course?		✓			
6	How do you rate the percentage of courses having LAB components?		✓			
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			
	Suggestions (if any)	practical knowledge has to be implemented by				

Suggestions: Introducing more laboratory than theories

Signature Kaifu

VB
Principal

STUDENTS FEEDBACK ON CURRICULUM

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Academic Year	2016-17
Branch	EEE
Name of the Student	UMESH T P
USN	15G14EE411

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?		✓			
3	Relevance for implementation in projects			✓		
4	How do you rate the electives offered in relation to the technological advancements?	✓				
5	How do you rate the evaluation scheme designed for each of the course?		✓			
6	How do you rate the percentage of courses having LAB components?			✓		
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			
	Suggestions (if any)	Specify problem has to be solved				

Suggestions: In each units. In each subject each unit only. These topics are there. problem not specifies topic wise

Signature

Umesh T P

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesareghatta Main Road
Bengaluru - 560 057

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Academic Year	2016-17
Branch	EEE
Name of the Student	Puneeth T. J.
USN	15G13EE409

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?	✓				
3	Relevance for implementation in projects		✓			
4	How do you rate the electives offered in relation to the technological advancements?		✓			
5	How do you rate the evaluation scheme designed for each of the course?			✓		
6	How do you rate the percentage of courses having LAB components?			✓		
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				
	Suggestions (if any)	Industrial training is required in curriculum				

Suggestions: Semester. Syllabus content has to be expanded what to study in depth.

Signature

Puneeth T. J.

Principal

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14/5, Chikkasandra, Hosaraghatta Main Road
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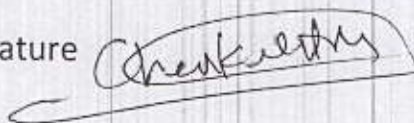
Academic Year	2016-17
Branch	EPE
Name of the Student	CHANDAN KUMAR NEWATIA
USN	15G11EE010

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	How do you rate the syllabus of the courses that you have studied in relation to the competencies expected out of the course?	✓				
2	How do you rate the allocation of the credits to the courses?		✓			
3	Relevance for implementation in projects			✓		
4	How do you rate the electives offered in relation to the technological advancements?	✓				
5	How do you rate the evaluation scheme designed for each of the course?		✓			
6	How do you rate the percentage of courses having LAB components?			✓		
7	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution		✓			
	Suggestions (if any)	Certification course has to be conducted.				

Suggestions: once in a year & also Industrial training.

Signature




Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hasaraghatta Main Road
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FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016-17
Branch	Electrical & Electronics
Name of the Faculty	Rukmangada R
Designation	Asst. Professor
Subject/Sub. code	Analog Electronic Circuits

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	✓				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?		✓			
3	Is the timely coverage of curriculum possible in the mentioned number of hours?	✓				
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?		✓			
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	✓				
6	Curriculum is suitable to the course		✓			
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	✓				

Suggestions: Subject is clear & knowledge only think they don't know much regarding practical things so if we conduct workshop / Certification course then it will be useful.

Signature: *Rukmangada R*

Principal
Sapthagiri College of Engineering
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FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution

Academic Year	2016-17
Branch	E.E.E
Name of the Faculty	Dharmodhan A
Designation	Assistant Professor
Subject/Sub. code	Power System Analysis

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	✓				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?		✓			
3	Is the timely coverage of curriculum possible in the mentioned number of hours?	✓				
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?	✓				
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	✓				
6	Curriculum is suitable to the course		✓			
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	✓				

Suggestions: Lab is there but if conduct industrial visit or workshop then it is easy for the student to understand.

Signature: *[Signature]*

Principal
Sapthagiri College of Engineering
 14/5, Chikkasandra, Heeraghatta Main Road
 Bengaluru - 560 057

FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016
Branch	EEE
Name of the Faculty	Deekha S.N
Designation	Associate professor
Subject/Sub. code	15EE32, Circuit Analysis

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	✓				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?	✓				
3	Is the timely coverage of curriculum possible in the mentioned number of hours?		✓			
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?	✓				
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?	✓				
6	Curriculum is suitable to the course	✓				
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	✓				

Suggestions: More practical hours is required then it is easy to understand the concepts for the students

Signature

Principal

Sapthagiri College of Engineering
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FACULTY FEEDBACK ON CURRICULUM

This questionnaire is intended to collect information relating to your satisfaction towards the curriculum, teaching, learning and evaluation. The information provided by you will be kept confidential and will be used as important feedback for quality improvement of the program of studies/institution.

Academic Year	2016
Branch	EEE
Name of the Faculty	Suretha G
Designation	Asst Professor
Subject/Sub. code	15EE33

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	Do you feel that the curriculum is defined in a way to clarify your teaching goals and what you expect your students to learn?	✓				
2	Is the curriculum sufficient to bridge the gap between industry standards /current global scenarios and academics?	✓				
3	Is the timely coverage of curriculum possible in the mentioned number of hours?	✓				
4	Sufficient reference material and books are available for the topics mentioned in the curriculum?	✓				
5	The evaluation methods mentioned in the curriculum are sufficient for providing proper assessment?		✓			
6	Curriculum is suitable to the course	✓				
7	The curriculum/course of this subject increased my knowledge and perspective in the subject area	✓				

Suggestions: More Industrial visit & Practical knowledge is required

Signature Suretha G.

Principal

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14/5, Chikkasandra, Hosurghatta Main Road
Bengaluru - 560 057



ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	Nolla PJ 2016		
Branch	EEE		
Name	Nolla PJ		
Status : Work/Study	COSMONET		
Phone no	8277113123		

Rate the curriculum/sylabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)		✓			
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				
4	How do you rate the learning experience in terms of their relevance to the real life application		✓			
5	Ability to work in teams	✓				
6	Ability to link theory to practice		✓			
7	How do you rate the course/curriculum content that you have learnt in relation to your current job	✓				
8	Compatibility with industry standards	✓				

Suggestions: Placement activities are good but students are lagging in practical things they don't have idea regarding ckt breaker, rheostat etc.

Signature

Nolla

Principal

Sapthagiri College of Engineering
 14/5, Chikkasandra, Hesaraghatta Main Road
 Bengaluru - 560 057

ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	Pallavi 2016
Branch	EEE
Name	Pallavi Mazumdar
Status : Work/Study	ICICI Bank
Phone no	7829712587

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)		✓			
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓	✓			
4	How do you rate the learning experience in terms of their relevance to the real life application	✓				
5	Ability to work in teams	✓				
6	Ability to link theory to practice		✓			
7	How do you rate the course/curriculum content that you have learnt in relation to your current job	✓				
8	Compatibility with industry standards		✓			

Suggestions: Practical knowledge is less if they conduct more master workshop/certification courses then it is useful

Signature *Pallavi*

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesarghatta Main Road
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ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	2016.
Branch	Electrical & Electronics
Name	Deepak A patil
Status : Work/Study	Technologies Pvt Ltd.
Phone no	9066195739

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)		✓			
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				
4	How do you rate the learning experience in terms of their relevance to the real life application		✓			
5	Ability to work in teams	✓				
6	Ability to link theory to practice	✓				
7	How do you rate the course/curriculum content that you have learnt in relation to your current job		✓			
8	Compatibility with industry standards	✓				

Suggestions: Students they donot much have ideal ckt boarder -
emulator etc if they conduct any course on this it will be
useful.

Signature Deepak

Principal

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ALUMNI FEEDBACK ON CURRICULUM

We are glad that you have spent valuable years pursuing courses of your choice at SCE. We shall be thankful if you can spare some of your valuable time to fill up this feedback form and give us valuable suggestions for further improvement of the College. Your valuable inputs will be of great use to improve the quality of our academic programs and enhance the credibility of our Institution. Rate the adequacy of following as they were during your tenure as a student

Year of Passing	2016
Branch	EEE
Name	Bhagya Lakshmi
Status : Work/Study	NFT Data
Phone no	7 204 44 3716

Rate the curriculum/syllabus on the following Points

SL NO	Statements	Excellent	Very good	Good	Average	Below Average
		5	4	3	2	1
1	When you compare yourself with other counterparts from other Institution, you feel that you got most of all the facilities which is not available in other Institution	✓				
2	Learning value (in terms of skills, concepts, knowledge, analytical abilities or broadening perspectives)		✓			
3	Curriculum is sufficient to make you analyze the engineering problems and its suitable solution	✓				
4	How do you rate the learning experience in terms of their relevance to the real life application	✓				
5	Ability to work in teams	✓				
6	Ability to link theory to practice	✓				
7	How do you rate the course/curriculum content that you have learnt in relation to your current job		✓			
8	Compatibility with industry standards	✓				

Suggestions: placement training has to be covered out.
entire semester

Signature Bhagya Lakshmi

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Sapthagiri College of Engineering
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Sapthagiri College of Engineering

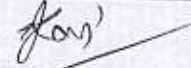


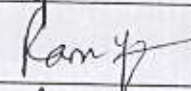
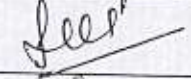

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Department of Electrical & Electronics Engineering

29-05-2017

CIRCULAR

This is to inform that the following Curriculum Board members are requested to attend the meeting on 30/05/2017 at 10.00AM in the HODs chamber to discuss about the analyzing of curriculum syllabus of academic year 2017-18.

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodhan A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	


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HOD, EEE
PROF & HOD
Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.

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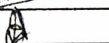
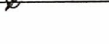
Department of Electrical & Electronics Engineering

Minutes of Meeting

With reference to above circular dated 29.05.2017 the curriculum board members assembled in HODs chamber for the following agenda.

AGENDA:

- Reviewing the department curriculum syllabus of academic year 2017-18.
- Reviewing the feedback analysis of various stakeholders for the academic year 2016-17
- Identifying the gaps.
- Action to be taken for identifying the gaps.
- The following Curriculum board members were present

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

Sl No.	SEM	Course Title	Identified Gap
1	IV	Switch gear and Protection	Lack of knowledge about maintenance and safe operation of circuit breaker
2	V	Transmission and Distribution	Lack of knowledge about design of external insulation from permanent DC voltage

The following points are discussed in the meeting

- The committee members reviewed the department curriculum syllabus.
- The committee members discussed about the feedback of department curriculum syllabus.
- The members identified the gaps based on the syllabus.
- The following action were taken for identifying the gaps.

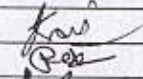
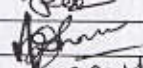
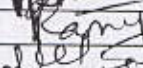
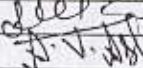
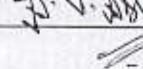

ACTION TAKEN:

Based on the Feedback obtained from the students, faculties alumini and analysis of syllabus by academic committee members it was decided to conduct certification course on "Safe Operation and Maintenance of Circuit Breaker" and "The Design of External Insulation from permanent AC voltage" to overcome the gaps identified in the curriculum/syllabus.

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Department of Electrical & Electronics Engineering

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
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4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

HOD,EEE

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.



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Department of Electrical & Electronics Engineering

To

Date: 02.06.2017

IQAC Coordinator
Sapthagiri College of Engineering
Bangalore-560057

Respected Sir

Subject: "Requisition for conduction of certification course and approval from governing council".

With respect to the academic committee members meeting was held for analyzing department curriculum/syllabus for the academic year 2017-18. The committee members identified few gaps after analyzing the syllabus and feedback from the stake holders. To bridge the gaps identified in the curriculum the committee members decided to conduct a certification course "Safe Operation and Maintenance of Circuit Breaker" for the academic year 2017-18. So I request you to forward and get the approval from governing council for the same.

Thanking you,

Enclosed: Budget Proposal

*Forwarded to the GC
approval & ratification
[Signature]*

[Signature]

HOD, EEE

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bangalore - 560057.

[Signature]

Principal

Sapthagiri College of Engineering
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Department of Electrical & Electronics Engineering

To,

IQAC Coordinator
Sapthagiri College of Engineering
Bangalore - 560057.

Respected Sir,

Subject: "Budget proposal for conduction of certification program on Safe Operation and Maintenance of Circuit Breaker"

With reference to above subject, I undersigned would like to bring the following for your kind information and consideration. As a part of programming skill development for EEE students, department of Electrical and Electronics Engineering would like to conduct 5 days Certification Course on "Safe Operation And Maintenance Of Circuit Breaker" from 25-Jul-2017 to 29-Jul-2017.

In this regard, I request you to kindly grant permission for the conduction of the course the above specified event for Please grant permission for the sanction of Rs.3744 for the conduction of the above mentioned program and oblige.

Estimated Budget

Sl. No.	Item	Quantity	Unit Cost in Rs.	Total cost in Rs.
1	Certificates	98	20	2744
2	others	-	-	1000
Grand Total				3744

Thanking You,

HOD, EEE

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bangalore - 560057.

*Forwarded for the
QC approval & signature
Jen*

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
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Sapthagiri College of Engineering

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Department of Electrical & Electronics Engineering

10-07-2017

CIRCULAR

This is to inform that the following Curriculum Board members are requested to attend the meeting on 11/07/2017 at 10.30AM in the HODs chamber to discuss about the certification course.

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

HOD

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.

Principal

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Sapthagiri College of Engineering

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#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057

Department of Electrical & Electronics Engineering

Date: 13-07-2017

To,

S Bhagwan
Managing Director,
Race Technology,
Bangalore .

Respected Sir,

Subject: Invitation as a "Guest Speaker" in certification program and to attend meeting to discuss about the certification program

Department of Electrical and Electronics Engineering have planned to conduct a certification program titled "Safe Operation and Maintenance of Circuit Breaker" for 5th semester students from 25-07-2017 to 29-07-2017. In this connection, we are privileged to invite you as a guest speaker on the above mentioned topic.

Thanking you for your kind acceptance to our request on phone. We request you to attend the meeting to discuss about the conduction of certification course on 11/07/2017, 10.30AM. We look forward to welcome you at SCE.

Thanking you

Yours faithfully

HOD,EEE

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bangalore - 560057.

Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

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Department of Electrical & Electronics Engineering

Minutes of Meeting

A meeting was conducted on 11-Jul-2017 in EEE HOD's Chamber to discuss and approve the following about the 5 days Certification Course for 5th semester EEE Students.

- **Course Title :** "Safe Operation and Maintenance of Circuit Breaker"
- **Resource Personnel :** S Bhagwan. Managing Director, Race Technology, Bengaluru.
- **Course Duration & Date:** 5 Days from 25-Jul-2017 to 29-Jul-2017.
- **Course Content :**

Dates	SESSION 1 (8.30am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.30pm-4.00pm)
25-7-2017 Tuesday	Active and passive network components Circuit breaker utilization. Alternative forms of MV switchgear	Fuse switches HV fuses in combination with and as alternatives to circuit breakers ring main units	Hands on Safe Operation and examples
26-7-2017 Wednesday	Air break and air blast switchgear SF6 vacuum Switchgear in association with isconnectors	Principles of current interruption Plain break circuit breakers Bulk and small oil volume circuit breakers	Hands-on Collections at Bulk and small oil volume circuit breakers
27-7-2017 Thursday	Fixed and withdraw-able designs Switchgear standards	Simple and complex protection systems Switchgear ancillaries,	Hands-on measurement CTs, VTs and relays Cable Connections
28-7-2017 Friday	general safety precautions the use of personal protective equipment	Principles of safety rules Principles of personal authorization	Hands on Operative training for safe operation of switchgear
29-7-2017 Saturday	Case study - Specification for a 132 KV Switchboard	Different techniques are used to extinguish the arc including Lengthening or deflecting the arc Intensive cooling (in jet chambers	Hands on safety policies in my company and how they might be improved Test Conduction

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Department of Electrical & Electronics Engineering

The following Curriculum board members were present

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dharmodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	
7	S Bhagwan.	Guest Speaker	

HOD, EEE

PROF & HOD

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Department of Electrical & Electronics Engineering

NOTICE

As a part of programming skill development Department of Electrical and Electronics Engineering is conducting Five days Certification Course "Safe Operation and Maintenance of Circuit Breaker" from 25-July-2017 to 29-July-2017

All the 5thsem EEE students must attend the course compulsorily.

Signature of HOD

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.

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Department of Electrical & Electronics Engineering

Certification Program: "Safe Operation and Maintenance of Circuit Breaker"

Lesson Plan

Dates	SESSION 1 (8.30am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.30pm-4.00pm)	No. of Hours
25-7-2017 Tuesday	Active and passive network components Circuit breaker utilization. Alternative forms of MV switchgear	Fuse switches HV fuses in combination with and as alternatives to circuit breakers ring main units	Hands on Safe Operation and examples	6
26-7-2017 Wednesday	Air break and air blast switchgear SF6 vacuum Switchgear in association with iso connectors	Principles of current interruption Plain break circuit breakers Bulk and small oil volume circuit breakers	Handson Collections at Bulk and small oil volume circuit breakers	6
27-7-2017 Thursday	Fixed and with draw-able designs Switchgear standards	Simple and complex protection system switchgear ancillaries,	Handson measurement CTs, VTs and relays Cable Connections	6
28-7-2017 Friday	general safety precautions the use of personal protective equipment	Principles of safety rules Principles of personal authorization	Hands on Operative training for safe operation of switchgear	6
29-7-2017 Saturday	Case study – Specification for a 32 KV Switchboard	Different techniques are used to extinguish the arc including Lengthening or deflecting the arc Intensive cooling (in jet chambers	Hands on safety policies in my company and how they might be improved Test Conduction	6
Total				30

HOD, EEE

GUEST SPEAKER

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.

Principal

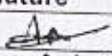
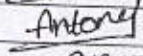
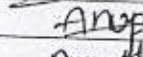
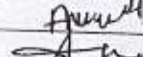
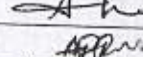

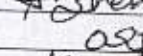
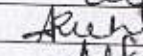
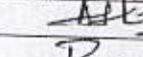
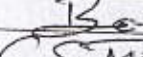


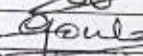
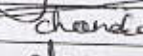
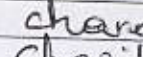
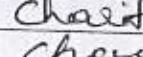
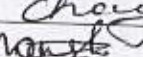
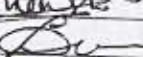
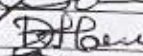
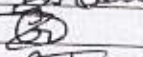
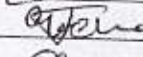
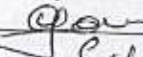
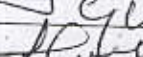

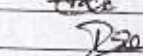

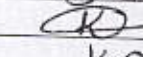
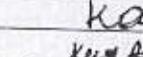
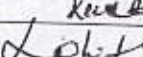
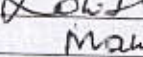
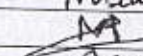
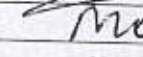
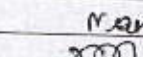
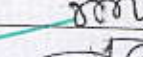




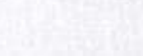

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Department of Electrical and Electronics Engineering

5 days Certification Program on
"Safe Operation and Maintenance of Circuit Breaker"

Students Enrollment

Academic Year (2017-18) ODD

SL.No	USN	Student Name	Signature
1	1SG15EE005	ANNAPURNA SINGH	
2	1SG15EE006	ANTONY ROSHAN JOY	
3	1SG15EE007	ANUP H V	
4	1SG15EE008	ANUSHA B	
5	1SG15EE009	ANUSHA K	
6	1SG15EE010	APOORVA K G	
7	1SG15EE011	ARPITA SHARMA	
8	1SG15EE012	ARPITHA SRINIVASA	
9	1SG15EE013	ARUNA B P	
10	1SG15EE014	ATHIYA MOHAMMADI	
11	1SG15EE015	BALAJI VENKATESH	
12	1SG15EE017	C S MOHANA	
13	1SG15EE019	CHAITRA S	
14	1SG15EE020	CHANDAN G	
15	1SG15EE021	CHANDAN GOWDA P	
16	1SG15EE022	CHANDAN KUMAR	
17	1SG15EE023	CHANDANA B	
18	1SG15EE024	CHARITHA M C	
19	1SG15EE025	CHAYA K	
20	1SG15EE026	D MANISH NAICKER	
21	1SG15EE027	DARSHAN N	
22	1SG15EE028	DHANUSH P	
23	1SG15EE029	G TEJASHREE	
24	1SG15EE030	GAJENDRA N	
25	1SG15EE031	GANESH RAO S	
26	1SG15EE034	GURURAJA D	
27	1SG15EE035	HARSHITH GOWDA S	
28	1SG15EE036	HARSHITHA V	
29	1SG15EE037	IRENE JACOB	
30	1SG15EE038	JEEVITHA A	
31	1SG15EE039	K LAVENYA	
32	1SG15EE040	KARTHIK B	
33	1SG15EE041	KEERTHANA R	
34	1SG15EE042	LOHITH S	
35	1SG15EE046	MANASA H	
36	1SG15EE047	MANISH MANJUNATH	
37	1SG15EE049	MANOHARA S	
38	1SG15EE050	MANOJ B N	
39	1SG15EE051	MANOJ N	
40	1SG15EE403	AJAY BHAVA S	

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057
Department of Electrical and Electronics Engineering

SL.No	USN	Student Name	Signature
41	1SG16EE404	AKHILESH V	Akhilesh
42	1SG16EE405	AKHILESH VINOD	Akhilesh
43	1SG16EE409	CHANDAN K	Chandan
44	1SG16EE411	GEETHA S	Geetha
45	1SG16EE414	HARISH KUMAR M	Harish
46	1SG16EE415	JAYANTH M V	Jayanth
47	1SG16EE418	KAUSHITH GOWDA M	Gowda
48	1SG16EE419	KEERTHANKUMAR H N	Keerthana
49	1SG16EE420	KIRAN KUMAR K	Kiran
50	1SG16EE422	KRANTHIKUMAR G S	Kranthi Kumar
51	1SG16EE423	LAKSHMANA H R	Lakshmana
52	1SG15EE053	MEGHANA S HULIKAI	Meghana
53	1SG15EE054	MOHAMED JAEFFER SAADIQ	Mohamed
54	1SG15EE056	MOUNIKA G B	Mounika
55	1SG15EE057	NAGARAJ	Nagaraj
56	1SG15EE05E	NAVYA S R	Navya
57	1SG15EE05E	NETHRA R	Nethra
58	1SG15EE06C	NITHYA J	Nithya
59	1SG15EE061	PAWAN KUMAR D	Pawan
60	1SG15EE062	PRAJWAL S R	Prajwal
61	1SG15EE064	PRARTHANA A PADMANABH	Prarthana
62	1SG15EE067	PRIYA J SHANKAR	Priya
63	1SG15EE068	R ABHISHEK	Abhishek
64	1SG15EE069	RACHANA M	Rachana
65	1SG15EE070	RAGHAVENDRA M	Raghu
66	1SG15EE071	RAGHAVENDRA S	Raghu
67	1SG15EE072	RAGI JAYA	Ragi
68	1SG15EE073	RAMACHANDRA	Ramachandra
69	1SG15EE075	RAVEESH VENKATESH	Raveesh
70	1SG15EE076	RAVI PRAKASH H	Ravi
71	1SG15EE077	ROHITH R	Rohith
72	1SG15EE078	S DARSHAN	S Darshan
73	1SG15EE079	SACHIN Y	Sachin
74	1SG15EE080	SANDESH V	Sandesh
75	1SG15EE081	SATHISH R	Sathish
76	1SG15EE082	SHANU	Shanu
77	1SG15EE083	SHARATH C	Sharath
78	1SG15EE084	SHRIJANA R KUMAR	Shrijana
79	1SG15EE085	SOUNDARYA M	Soundarya
80	1SG15EE086	SRIKANT KADGI	Srikant
81	1SG15EE088	SUMANTH S	Sumanth
82	1SG15EE089	SUPRIYA P R	Supriya
83	1SG15EE090	SURABHI M	Surabhi
84	1SG15EE091	SWATHI B C	Swathi B C
85	1SG15EE092	UMESH KUMAR B R	Umesh

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14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057
Department of Electrical and Electronics Engineering

SL.No	USN	Student Name	Signature
86	1SG15EE093	VARUN K SHETTY	<i>Varuna</i>
87	1SG15EE094	VIKAS KUMAR SINGH	<i>Vikas</i>
88	1SG15EE095	VINITH KUMAR T	<i>Vinith</i>
89	1SG15EE096	VINUTHA D	<i>Vinutha</i>
90	1SG15EE097	VISHA S PUJARI	<i>Vishal</i>
91	1SG15EE422	MEGHANA M.S	<i>Meghana M.S</i>
92	1SG15EE426	NANDEESH K.S	<i>Nande</i>
93	1SG16EE431	NAYANASHREE B	<i>Nayan</i>
94	1SG16EE432	NILESH N GUNJIKAR	<i>Nilesh</i>
95	1SG16EE434	NITHIN G	<i>Nithin</i>
96	1SG16EE439	RAKESH S	<i>Rishi</i>
97	1SG16EE443	SHASHANK K.S	<i>Shash</i>
98	1SG16EE450	VARUN K.M	<i>Varun K.M</i>

[Signature]
(Program Coordinator)

[Signature]
PROF & HOD
Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.

[Signature]
Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

5 days Certification Program on
"Safe Operation and Maintenance of Circuit Breaker"

Attendance

Sl. No	USN	Student Name	25-07-2017		26-07-2017		27-07-2017		28-07-2017		29-07-2017		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
1	1SG15EE005	ANNAPURNA SINGH	1	2	3	4	5	6	6	7	8	9	10
2	1SG15EE006	ANTONY R. SHAN JOY D'SOUZA	1	2	3	4	5	6	7	8	9	10	11
3	1SG15EE007	ANUP H V	1	1	2	3	4	5	6	7	8	9	10
4	1SG15EE008	ANUSHA B	1	2	3	4	5	6	7	8	9	10	11
5	1SG15EE009	ANUSHA K	1	2	3	4	5	6	7	8	9	10	11
6	1SG15EE010	APOORVA K C	1	2	3	4	5	6	7	8	9	10	11
7	1SG15EE011	ARPITA SHARMA	1	2	3	4	5	6	7	8	9	10	11
8	1SG15EE012	ARPITHA SRINIVASA MURTHY	1	2	3	4	5	6	7	8	9	10	11
9	1SG15EE013	ARUNA B P	1	2	3	4	5	6	7	8	9	10	11
10	1SG15EE014	ATHIYA MOHAMMADI	1	2	3	4	5	6	7	8	9	10	11
11	1SG15EE015	BALAJI VENKATESH KALKONDA	1	2	3	4	5	6	6	7	8	9	10
12	1SG15EE017	C. S. MOHANA	1	2	3	4	5	6	7	8	9	10	11
13	1SG15EE019	CHAITRA S	1	2	3	4	5	6	7	7	8	9	10
14	1SG15EE020	CHANDAN G	1	2	3	4	5	6	7	8	9	10	11
15	1SG15EE021	CHANDAN GOWDA P	1	2	3	4	5	6	7	8	9	10	11
16	1SG15EE022	CHANDAN K L MAR	1	2	3	4	5	6	7	8	9	10	11
17	1SG15EE023	CHANDANA F	1	2	3	4	5	6	7	8	9	10	11
18	1SG15EE024	CHARITHA M C	1	2	3	4	5	6	7	8	9	10	11
19	1SG15EE025	CHAYA K	1	2	3	4	5	6	7	8	9	10	11
20	1SG15EE026	D. MANISH NAICKER	1	2	3	4	5	6	7	8	9	10	11
21	1SG15EE027	DARSHAN N	1	2	3	4	5	6	7	8	9	10	11
22	1SG15EE028	DHANUSH P	1	2	3	4	5	6	7	8	9	10	11
23	1SG15EE029	G. TEJASHREE	1	2	3	4	5	6	7	8	9	10	11
24	1SG15EE030	GAJENDRA N	1	1	2	2	3	4	5	6	7	8	9
25	1SG15EE031	GANESH RAO S	1	2	3	4	4	5	6	7	8	9	10
26	1SG15EE034	GURURAJA D	1	2	3	4	5	6	7	8	9	10	11
27	1SG15EE035	HARSHITH GOWDA S	1	1	2	3	4	5	6	7	8	9	10
28	1SG15EE036	HARSHITHA V	1	2	3	4	5	6	7	8	9	10	11
29	1SG15EE037	IRENE JACOB	1	1	2	3	4	5	6	7	8	9	10
30	1SG15EE038	JEEVITHA A	1	2	3	4	5	6	7	8	9	10	11
31	1SG15EE039	K. LAVENYA	1	2	3	4	5	6	7	8	9	10	11
32	1SG15EE040	KARTHIK B	1	1	2	3	4	5	6	7	8	9	10
33	1SG15EE041	KEERTHANA R	1	1	2	3	4	5	6	7	8	9	10
34	1SG15EE042	LOHITH S	1	2	3	4	5	6	7	8	9	10	11
35	1SG15EE046	MANASA H	1	2	3	4	5	6	7	8	9	10	11
36	1SG15EE047	MANISH MANJUNATH NARAYANA	1	2	3	4	5	6	7	8	9	10	11
37	1SG15EE049	MANOHARA S	1	1	2	3	4	5	6	7	8	9	10
38	1SG15EE050	MANOJ B N	1	2	3	4	5	6	7	8	9	10	11
39	1SG15EE051	MANOJ N	1	2	3	4	5	6	7	8	9	10	11
40	1SG16EE403	AJAY BHAVA S	1	2	3	4	5	6	7	8	9	10	11
41	1SG16EE404	AKHILESH V	1	2	3	4	5	6	7	8	9	10	11

Sl No	USN	Student Name	25-07-2017		26-07-2017		27-07-2017		28-07-2017		29-07-2017		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
42	1SG16EE405	AKHILESH VINOD KALGUTKAR	1	2	3	4	5	6	7	8	9	10	11
43	1SG16EE409	CHANDAN K	1	2	3	4	5	6	7	8	9	10	11
44	1SG16EE411	GEETHA S	1	1	1	2	3	4	5	6	7	8	9
45	1SG16EE414	HARISH KUMAR M	1	2	3	4	5	6	7	8	9	10	11
46	1SG16EE415	JAYANTH M V	1	2	3	4	5	6	7	8	9	10	11
47	1SG16EE418	KAUSHITH GOWDA M	1	1	2	3	4	5	6	7	8	9	10
48	1SG16EE419	KEERTHAN KUMAR H N	1	2	3	3	4	5	6	7	8	9	10
49	1SG16EE420	KIRAN KUMAR K	1	1	2	3	4	5	6	7	8	9	10
50	1SG16EE422	KRANTHI KUMAR G S	1	2	3	4	5	6	7	8	9	10	11
51	1SG16EE423	LAKSHMANA H R	1	2	3	4	5	6	7	8	9	10	11
52	1SG15EE053	MEGHANA S HULIKAI	1	2	3	4	5	6	7	8	9	10	11
53	1SG15EE054	MOHAMED JAFFER SAADIO	1	2	3	4	5	6	7	8	9	10	11
54	1SG15EE056	MOUMIK S G B	1	2	3	4	5	6	7	8	9	10	11
55	1SG15EE057	NAGARA I	1	2	3	4	5	6	7	8	9	10	11
56	1SG15EE058	NAVYA S R	1	2	3	4	5	6	7	8	9	10	11
57	1SG15EE059	NETHRA R	1	2	3	4	5	6	7	8	9	10	11
58	1SG15EE060	NITHYA J	1	2	3	4	5	6	7	8	9	10	11
59	1SG15EE061	PAWAN K MARD	1	2	3	4	5	6	7	8	9	10	11
60	1SG15EE062	PRAJWAL S R	1	2	3	4	5	6	7	8	9	10	11
61	1SG15EE064	PRARTHANA A PADMANABH	1	2	3	4	5	6	7	8	9	10	11
62	1SG15EE067	PRIYA I SHANKAR	1	2	3	4	5	6	7	8	9	10	11
63	1SG15EE068	RABHISHEK	1	2	3	4	5	6	7	8	9	10	11
64	1SG15EE069	RACHANA M	1	2	3	4	5	6	7	8	9	10	11
65	1SG15EE070	RAGHAVENDRA M	1	2	3	4	5	6	7	8	9	10	11
66	1SG15EE071	RAGHAVENDRA S	1	2	3	4	5	6	7	8	9	10	11
67	1SG15EE072	RAGI JAYA	1	2	3	4	5	6	7	8	9	10	11
68	1SG15EE073	RAMACHANDRA	1	2	3	4	5	6	7	8	9	10	11
69	1SG15EE075	RAVEESH VENKATESH	1	2	3	4	5	6	7	8	9	10	11
70	1SG15EE076	RAVI PRAKASH H	1	2	3	4	5	6	7	8	9	10	11
71	1SG15EE077	ROHITH R	1	2	3	4	5	6	7	8	9	10	11
72	1SG15EE078	S DARSHAN	1	2	3	4	5	6	7	8	9	10	11
73	1SG15EE079	SACHIN Y	1	2	3	4	5	6	7	8	9	10	11
74	1SG15EE080	SANDESH V	1	2	3	4	5	6	7	8	9	10	11
75	1SG15EE081	SATHISH R	1	2	3	4	5	6	7	8	9	10	11
76	1SG15EE082	SHANU	1	2	3	4	5	6	7	8	9	10	11
77	1SG15EE083	SHARATH C	1	2	3	4	5	6	7	8	9	10	11
78	1SG15EE084	SHRUJANA P KUMAR	1	2	3	4	5	6	7	8	9	10	11
79	1SG15EE085	SOUNDARYA M	1	2	3	4	5	6	7	8	9	10	11
80	1SG15EE086	SRIKANT KADGE	1	2	3	4	5	6	7	8	9	10	11
81	1SG15EE088	SUMANATH S	1	2	3	4	5	6	7	8	9	10	11
82	1SG15EE089	SUPRIYA P P	1	2	3	4	5	6	7	8	9	10	11
83	1SG15EE090	SURABHI M	1	2	3	4	5	6	7	8	9	10	11
84	1SG15EE091	SWATHI B C	1	2	3	4	5	6	7	8	9	10	11
85	1SG15EE092	UMESH KUMAR B R	1	2	3	4	5	6	7	8	9	10	11
86	1SG15EE093	VARUN K SHETTY	1	2	3	4	5	6	7	8	9	10	11
87	1SG15EE094	VIKAS KUMAR S NGH	1	2	3	4	5	6	7	8	9	10	11

Principal

Sl. No	USN	Student Name	25-07-2017		26-07-2017		27-07-2017		28-07-2017		29-07-2017		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
88	1SG15EE095	VINITH KUMAR T	1	2	3	4	5	6	7	8	9	10	11
89	1SG15EE096	VINUTHA D	1	2	3	4	5	6	7	8	9	10	11
90	1SG15EE097	VISHAL S PILLARI	1	2	3	3	5	6	7	8	9	10	11
91	1SG15EE422	MEGHANA M.S	1	2	3	4	5	6	7	7	9	10	11
92	1SG15EE426	NANDEESH K.S	1	2	3	4	5	6	7	8	9	10	11
93	1SG16EE431	NAYANASHREE B	1	2	3	4	5	6	7	7	9	10	11
94	1SG16EE432	NILESH N GUNJIKAR	1	2	3	4	5	6	7	7	9	10	11
95	1SG16EE434	NITHIN G	1	2	3	4	5	6	7	8	9	10	11
96	1SG16EE439	RAKESH S	1	2	3	4	5	6	7	8	9	9	9
97	1SG16EE443	SHASHANK K.S	1	2	3	4	5	6	7	8	9	10	11
98	1SG16EE450	VARUN K.M	1	2	3	4	5	6	7	8	9	10	11
		Signature	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m	R ^m

See
Sweetish
Program
Coordinator

HOD
PROF & HOD
Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bangalore - 560057.

[Signature]
Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057



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(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)
#14/5, Chikkasandra, Hesarahatta Main Road, Bengaluru - 560057

Department of Electrical & Electronics Engineering

5 days Certification Course on "Safe Operation And

Maintenance Of Circuit Breaker"

Test Time Table

Sl. No.	DATE	DAY	TIMINGS
1	29-07-2017	Saturday	4.00PM-5.00PM

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Department of Electrical & Electronics Engineering

5 days Certification Course on "Safe Operation And Maintenance Of Circuit Breaker"

Question Paper

Duration : 1hr

Maximum marks : 25

Note: Question number 1-25 (1M each)

Answer all the Questions:

- 1) What is the average rate of rise of restriking voltage upto the first peak?
 - a. $525 * 10^3 \text{ kV / sec}$
 - b. $453 * 10^3 \text{ kV / sec}$
 - c. $582 * 10^3 \text{ kV / sec}$
 - d. $467 * 10^3 \text{ kV / sec}$
- 2) Circuit breakers usually operate under
 - a. Steady short circuit current
 - b. Sub transient state of short circuit current
 - c. Transient state of short circuit current
 - d. None of these
- 3) What is the actuating quantity for the relays?
 - a. Magnitude
 - b. Frequency
 - c. Phase angle
 - d. All of these
- 4) Which among these are the main characteristics of a fuse element?
 - a. Low melting point
 - b. High conductivity
 - c. Least deterioration due to oxidation
 - d. All of the above
- 5) What is the making capacity of the circuit breaker?
 - a. Less than the asymmetrical breaking capacity of the breaker
 - b. Greater than the asymmetrical breaking capacity of the breaker
 - c. Equal to the asymmetrical breaking capacity of the breaker
 - d. Equal to the symmetrical breaking capacity of the breaker

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- 6) SF_6 is which type of gas?
- Electro positive
 - Electro negative
 - Both (a) and (b)
 - None of these
- 7) In a circuit breaker the contact space is ionised by what?
- Field emission from the contact surface.
 - Thermal emission from the contact surface.
 - Thermal ionisation of gas.
 - All of above.
- 8) A three phase, 33 kV oil circuit breaker is rated 1200 A, 2000 MVA, 3s. What is its symmetrical breaking current?
- 1200 A
 - 3600 A
 - 35 kA
 - 104.8 kA
- 9) What should be the value of fusing factor?
- Equal to zero
 - Equal to one
 - Less than one
 - More than one
- 10) What is the relation between the fusing current and the diameter of the wire?
- $I = k d^3$
 - $I = k d^{3/2}$
 - $I = k d^2$
 - $I = k d^{2/3}$
- 11) The making and breaking currents of a 3 phase ac circuit breakers in power systems are respectively in _____ form.
- rms value, rms value
 - instantaneous value rms value



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- c. rms value, instantaneous value
- d. instantaneous value, instantaneous value

12) Why is an isolator installed?

- a. To isolate one portion of the circuit from another
- b. As an substitute for the circuit breaker
- c. It used on either sides of the circuit breaker
- d. Both (a) and (c)
- e. None of these

13) Assertion (A): In comparison to making capacity of a circuit breaker its breaking capacity is normally higher.

Reason (R): The breaking capacity of a CB is expressed as $\sqrt{3} * VI * 10^{-6}$ MVA

- a. Both A and R are true and R is the correct explanation of A
- b. Both A and R are true and R is not the explanation of A
- c. A is true but R is false
- d. A is false but R is true.

15) Which circuit breaker is preferred to be installed in extra high voltage AC system?

- a. Bulk oil type circuit breaker
- b. Air blast circuit breaker
- c. SF₆ circuit breaker
- d. Vacuum circuit breaker

16) A three phase circuit breaker is rated 2000 MVA, 33 kV. What will be its making current?

- a. 35 kA
- b. 49 kA
- c. 70 kA
- d. 89 kA

17) A fuse wire of circular cross section has a radius of 0.8mm. The wire blows off at a current of 9A. What will be the radius of the wire that will blow off at a current of 1A?

- a. 0.2 mm
- b. 0.18 mm
- c. 0.28 mm
- d. 0.3 mm

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- 18) Which among these tests are performed to check the nation or international standards?
- Type test.
 - Production tests.
 - Site checks.
 - All of the above.
- 19) Refer to the following facts to answer the question A 50 Hz, 11 kV, 3 phase alternator with earthed neutral having a reactance of 3 ohms per phase and is connected to a bus bar through a circuit breaker, if the distributed capacitance up to CB between the phase and neutral is $0.01 \mu F$. What is the frequency of oscillations?
- 10000 Hz
 - 12500 Hz
 - 12628 Hz
 - 13265 Hz
- 20) What is switchgear?
- An apparatus used for switching, controlling and protecting the electrical circuits and equipments.
 - It detects the faults only.
 - It corrects the faults only.
 - All of the above.
- 21) What is / are the main disadvantage / s of using oil as the quenching medium in the circuit breaker
- Need periodical replacement.
 - Risk of formation of explosive mixture with air.
 - Possibility of causing fire hazards.
 - All of the above.
- 22) Which of the following circuit breakers has the lowest operating voltage?
- SF_6 circuit breaker
 - Air break
 - Air blast
 - Minimum oil circuit breaker
- 23) The most efficient torque producing actuating structure for the induction type relays is
- Shaded pole structure
 - Watt hour meter structure

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- c. Induction cup structure
 - d. Single induction loop structure
- 24) Plug setting of a electromagnetic relay can be altered by varying
- a. Number of ampere turns
 - b. Air gap of magnetic path
 - c. Adjustable back stop
 - d. None of these
25. Which of the following circuit breakers has the highest operating voltage?
- a. SF₆ circuit breaker
 - b. Air break
 - c. Air blast
 - d. Minimum oil circuit breaker

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Department of Electrical & Electronics Engineering

Approved by Academic Committee Members & HOD

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	
7	S Bhagwan.	Guest Speaker	

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Department of Electrical & Electronics Engineering

5 days Certification Course on

"Safe Operation And Maintenance Of Circuit Breaker"

Solutions for the Questions

Duration : 1hr

Maximum marks : 25

Note: Question number 1-25 (1M each)

Answers

1. Option B
2. Option D
3. Option D
4. Option D
5. Option C
6. Option C
7. Option C
8. Option C
9. Option C
10. Option D
11. Option D
12. Option A
13. Option C
14. Option A
15. Option C
16. Option D
17. Option B
18. Option A

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- 19. Option C
- 20. Option D
- 21. Option D
- 22. Option C
- 23. Option C
- 24. Option D
- 25. Option B

Approved by Academic Committee Members & HOD

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
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3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha C	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

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5 days Certification Course on "Safe Operation And

Maintenance Of Circuit Breaker"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
4. Effectiveness of the Hands-on Sessions
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
8. Any Suggestions:

It was nice, I understand Basic & practical
Maintenance of circuit breaker & also operation
I am happy with test conductor.

Student Name : Anup H.V

Anup
Student Signature:

**5 days Certification Course on "Safe Operation And
Maintenance Of Circuit Breaker"**

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) ☒ Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good d) ☒ Excellent
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a) Poor b) Satisfactory c) Good d) ☒ Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ☒ Excellent
8. Any Suggestions:

*I thank expert for sharing practical knowledge
on operation & maintenance of C.B. program was
went as per schedule.*

Student Name : *CS Mohan*

CS Mohan
Student Signature:

Principal

5 days Certification Course on "Safe Operation And

Maintenance Of Circuit Breaker"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory ☒ c) Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory ☒ c) Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory ☒ c) Good d) Excellent
4. Effectiveness of the Hands-on Sessions
a) Poor b) Satisfactory ☒ c) Good d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory ☒ c) Good d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory ☒ c) Good d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory ☒ c) Good d) Excellent
8. Any Suggestions:

All 5 days program went as per schedule.
I understand well related to course.

Student Name :

Ajay Shree S

Student Signature:

Principal

5 days Certification Course on "Safe Operation And

Maintenance Of Circuit Breaker"


Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
4. Effectiveness of the Hands-on Sessions
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) ~~Good~~ d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ~~Excellent~~
8. Any Suggestions:

I understand very well contents delivered by
Teacher. Overall Test conduction was good.

Student Name :

Jane Jacob

Student Signature: 

**5 days Certification Course on "Safe Operation And
Maintenance Of Circuit Breaker"**

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
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a) Poor b) Satisfactory c) Good d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) Good d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent
8. Any Suggestions:

Thank you EEE dept, I was happy with the program & expert taught topics so easy & understandable manner.

Student Name :

Charith M.C

Student Signature:

Charith M.C

Sapthagiri College of Engineering

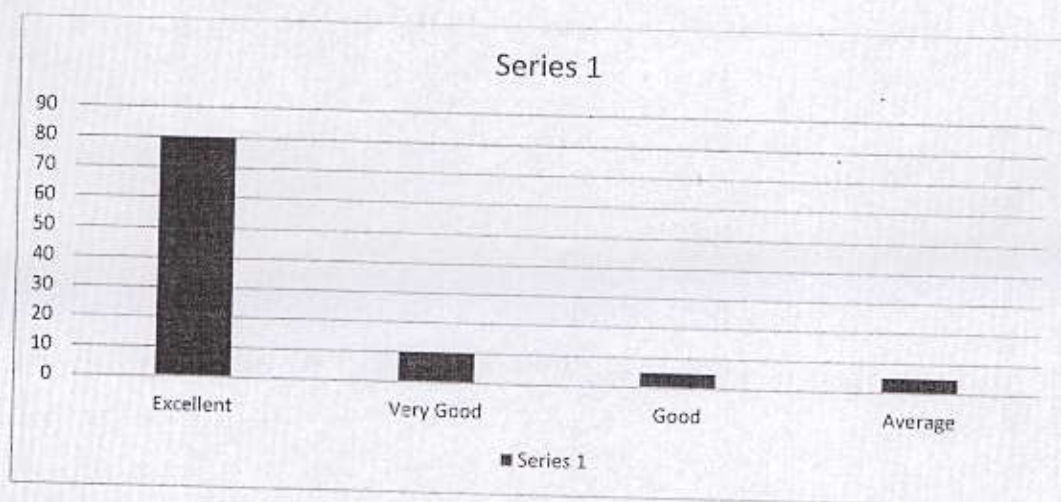
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Department of Electrical & Electronics Engineering

FEEDBACK ANALYSIS

Certification Programme: **"Safe Operation and Maintenance Of Circuit Breaker"**

No. of students participated	Student Feedback in percentage			
	Excellent	Very Good	Good	Average
98	80	10	5	5



Action Report:

80 % of students were completely happy with the certification program and 10 % of students felt it was a good program and remaining 5 % students were satisfied with the program and 5% were average with the program.

Action Taken:

The Feedback report which was collected from the students were sent to the principal and he would take necessary actions based on the comments and conduct more programs for the benefit of students.


Program Coordinator


Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057


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Sapthagiri College of Engineering
Bangalore - 560057.



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Bangalore-560057

Certificate

This is to Certify that Mr./Ms. _____
of _____ has participated
and successfully completed Five days Certification Course on ***“Safe Operation and
Maintenance of Circuit Breaker”*** from 25th July, 2017 to 29th July, 2017 organized
by the Department of Electrical & Electronics Engineering, Sapthagiri College of
Engineering.

HOD, Dept. of EEE

Principal

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Principal




Sapthagiri College of Engineering

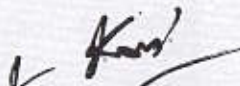
Bangalore-560057

Certificate

This is to Certify that Mr./Ms. Anusha. B - 1SG15EE008
of EEE has participated
and successfully completed Five days Certification Course on ***"Safe Operation and Maintenance of Circuit Breaker"*** from 25th July, 2017 to 29th July, 2017 organized
by the Department of Electrical & Electronics Engineering, Sapthagiri College of
Engineering.


HOD, Dept. of EEE


Principal
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14/5, Chikkasandra, Hosareghatta Main Road
Bengaluru - 560 057


Principal

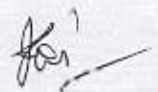


Sapthagiri College of Engineering


Bangalore-560057

Certificate

This is to Certify that Mr./Ms. Lobith - S 1SG15EE042
of EEE has participated
and successfully completed Five days Certification Course on ***“Safe Operation and Maintenance of Circuit Breaker”*** from 25th July, 2017 to 29th July, 2017 organized
by the Department of Electrical & Electronics Engineering, Sapthagiri College of
Engineering.


HOD, Dept. of EEE


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Department of Electrical & Electronics Engineering

Certificate Course Report

Department of EEE conducted Certificate Course on "Safe operation and maintenance of circuit breaker."

Guest Speaker: S Bhagwan, Managing Director, Race Technology, Bangalore.

Duration of the course: five days from July 25th 2017 to July 29th 2017

Course detail

Objective of the Course: The five day course made the students to be familiar with the this course students will discuss the application, installation, maintenance and testing issues relating to medium and high voltage switchgear, circuit breakers. To understand of the issues associated with the proper application, installation and maintenance of these critical items of equipment with an overriding emphasis on safety.

The course will develop and enhance an understanding of what is involved in the maintenance of these essential components of the power systems, through the tips and tricks learnt and developed by some of the world's pre-eminent electrical engineers.

Certificate course made them comfortable with the Safe Operation and maintenance of circuit breaker. Learning style adopted by students, which eventually is developed into a skill of their forte. Through this course, an ecstatic learning background paved way to a positive learning environment in the class where active participation was seen from every end. Faculty took the onus of interacting with the students personally to navigate them for the academic transition by becoming the guides by their side

Schedule of Certification Course

Dates	SESSION 1 (8.30am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.30pm-4.00pm)	No. of Hours
25-7-2017 Tuesday	Active and passive network components Circuit breaker utilization. Alternative forms of MV switchgear	Fuse switches HV fuses in combination with and as alternatives to circuit breakers ring main units	Hands on Safe Operation and examples	6
26-7-2017 Wednesday	Air break and air blast switchgear SF6 vacuum Switchgear in association with iso connectors	Principles of current interruption Plain break circuit breakers Bulk and small oil volume circuit breakers	Hands on Collections at Bulk and small oil volume circuit breakers	6


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Department of Electrical & Electronics Engineering

Dates	SESSION 1 (8.30am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.30pm-4.00pm)	No. of Hours
27-7-2017 Thursday	Fixed and withdraw-able designs Switchgear standards	Simple and complex protection system switchgear ancillaries,	Hands on measurement CTs, VTs and relays Cable Connections	6
28-7-2017 Friday	general safety precautions the use of personal protective equipment	Principles of safety rules Principles of personal authorization	Hands on Operative training for safe operation of switchgear	6
29-7-2017 Saturday	Case study - Specification for a 132 KV Switchboard	Different techniques are used to extinguish the arc including Lengthening or deflecting the arc Intensive cooling (in jet chambers	Hands on safety policies in my company and how they might be improved Test Conduction	6
Total				30

Conclusion: Certificate course made them comfortable with practical knowledge. Learning style adopted by students, which eventually is developed into a skill of their forte. Through this course, an ecstatic learning background paved way to a positive learning environment in the class where active participation was seen from every end. Faculty took the onus of interacting with the students personally to navigate them for the academic transition by becoming the guides by their side

It is a practice of the department to take care of any issues pertaining to the academics. In this connection department of EEE has conveyed meeting with Faculty members to discuss about any lapses with academic activities and felt the need to conduct a certificate Course. As part of Certificate course 4 faculty members were identified and assigned duties and responsibilities to carry out the Certificate course.

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Phone: 080-28372800/1/2

www.sapthagiri.edu.in

Fax: 080-28372797

Department of Electrical & Electronics Engineering




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Department of Electrical & Electronics Engineering

To,

IQAC Coordinator
Sapthagiri College of Engineering
Bangalore - 560057.

Respected Sir,

Subject: "Budget proposal for conduction of certification program on The Design of External Insulation from Permanent Ac Voltage"

With reference to above subject, I undersigned would like to bring the following for your kind information and consideration. As a part of programming skill development for EEE students, department of Electrical and Electronics Engineering would like to conduct 5 days Certification Course on "The Design Of External Insulation From Permanent Ac Voltage" from 25-Jan-2018 to 31-Jan-2018.

In this regard, I request you to kindly grant permission for the conduction of the course the above specified event for Please grant permission for the sanction of Rs.3940 for the conduction of the above mentioned program and oblige.

Estimated Budget

Sl. No.	Item	Quantity	Unit Cost in Rs.	Total cost in Rs.
1	Certificates	98	30	2940
2	Course Material and others			1000
Grand Total				3940

Thanking You,

*Forwarded for G.O. approval
a need be*

H.R. Ranganatha
Dr. H.R. Ranganatha
Prof. & H.O.D

Dept. of Information Science & Engg.
Sapthagiri College of Engineering
14/5 Chikkasandra, Hesaraghatta Main Road
BANGALURU-560 057

[Signature]
HOD

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Department of Electrical & Electronics Engineering
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Department of Electrical & Electronics Engineering

11-01-2018

CIRCULAR

This is to inform that the following Curriculum Board members are requested to attend the meeting on 12/01/2018 at 1.30PM in the HODs chamber to discuss about the certification course.

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

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Department of Electrical & Electronics Engineering

Date: 11-01-2018

To,
Dr Shivakumar Aradya,
Professor,
Acharya College of Engineering
Bangalore-560090,

Respected Sir,

Subject: "Invitation as a "Guest Speaker" in certification program and to attend meeting to discuss about the certification program."

Department of Electrical and Electronics Engineering have planned to conduct a certification program titled "The Design of External Insulation from Permanent Ac Voltage" for EEE students from 25-01-2018 to 31-01-2018. In this connection, we are privileged to invite you as a guest speaker on the above mentioned topic.

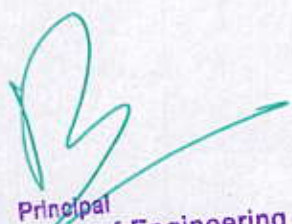
Thanking you for your kind acceptance to our request on phone. We request you to attend the meeting to discuss about the conduction of certification course on 12/01/2018, 1.30PM. we look forward to welcome you at SCE.

Thanking you


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Department of Electrical & Electronics Engineering

Minutes of Meeting

A meeting was conducted on 12-Jan-2018 in EEE HOD's Chamber to discuss and approve the following about the 5 days Certification Course for EEE Students.

Course Title : "The Design Of External Insulation From Permanent Ac Voltage"

Resource Personnel: Dr Shivakumar Aradya, Professor, Acharya College of Engineering
Bangalore-560090,

- **Course Duration & Date:** 5 Days from 25-Jan-2018 to 31-Jan-2018

- **Course Content :**

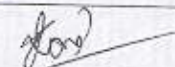


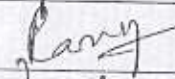
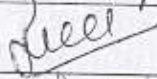

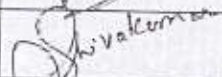
Dates	SESSION 1 (9.00am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.00pm-4.00pm)
25-01-2018 Thursday	<ul style="list-style-type: none"> • Introduction • Mechanism Of Flashover Under Pollution 	<ul style="list-style-type: none"> • Mathematical models • Experimentally based AC models 	<ul style="list-style-type: none"> • hands on pollution test methods
27-01-2018 Saturday	<ul style="list-style-type: none"> • Rvey of Experimental Results • Influence of the decree of pollution • Influence of the geometrical characteristics of the insulator 	<ul style="list-style-type: none"> • Influence of contaminant uniformity • Influence of contaminant characteristics • Solid layer method 	<ul style="list-style-type: none"> • Hands on Laboratory test methods Salt fog method
29-01-2018 Monday	<ul style="list-style-type: none"> • Statistical approach • Semi-statistical approach • Deterministic approach 	<ul style="list-style-type: none"> • Qualitative, service-based approach • Influence of non-standard test conditions, 	<ul style="list-style-type: none"> • Hands on Discussion of the validity of test results
30-01-2018 Tuesday	<ul style="list-style-type: none"> • Remedies Used In Service • To Reduce The Severity Due To Pollution 	<ul style="list-style-type: none"> • Principles of safety rules • Principles of personal authorization 	<ul style="list-style-type: none"> • Hands on Laboratory test results: test method
31-01-2018 Wednesday	<ul style="list-style-type: none"> • Influence of the length of the insulator • Influence of contamination uniformity • Insulator : cap and pin standards 	<ul style="list-style-type: none"> • Influence of the geometrical characteristics of the insulator. • solid layer according to 22% relation between 50% flashover • voltage and insulator length 	<ul style="list-style-type: none"> • Hands on Dynamic arc models and Test Conduction

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Department of Electrical & Electronics Engineering

The following Curriculum board members were present

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Rav	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodara A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	
7	Dr Shivakumar Aradya	Guest Speaker	


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Bengaluru - 560057.


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Department of Electrical & Electronics Engineering

NOTICE

As a part of programming skill development Department of Electrical and Electronics Engineering is conducting Five days Certification Course "The Design of External Insulation from Permanent Ac Voltage" from 25-Jan-2018 to 31-Jan-2018.

All the EEE students must attend the course compulsorily.

Signature of HOD

PROF & HOD

Department of Electrical & Electronics Engineering
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Department of Electrical & Electronics Engineering

Certification Program: "The Design of External Insulation from Permanent Ac Voltage"

Lesson Planner

Dates	SESSION 1 (9.00am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.00pm-4.00pm)	No. of Hours
25-01-2018 Thursday	Introduction Mechanism Of Flashover Under Pollution	Mathematical models Experimentally based AC models	Hands on pollution test methods	6
27-01-2018 Saturday	Review Of Experimental results Influence of the degree of pollution, Influence of the geometrical characteristics of the insulator	Influence of contaminant uniformity Influence of contaminant characteristics Solid layer method	Hands on Laboratory test methods Salt fog method	6
29-01-2018 Monday	Statistical approach Semi-statistical approach Deterministic approach	Qualitative, service- based approach Influence of non standard test conditions,	Hands on Discussion of the validity of test results	6
30-01-2018 Tuesday	Remedies Used In Service To Reduce The Severity Due To Pollution	Principles of safety rules Principles of personal authorization	Hands on Laboratory test results: test method	6
31-01-2018 Wednesday	Influence of the length of the insulator Influence of contamination uniformity Insulator : cap and pin standards	Influence of the geometrical characteristics of the insulator. solid layer according to 22% relation between 50% flashover voltage and insulator length	Hands on Dynamic arc models and Test Conduction	6
Total				30

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Bengaluru - 560057.

GUEST SPEAKER

Principal

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Bengaluru - 560057

5 days Certification Program on

“Design of External Insulation from Permanent AC Voltage”

Students Enrollment

Academic Year(2017-18 Even)

SL.No	USN	Student Name
1	1SG13EE015	CHANDAN KUMAR
2	1SG13EE048	SANDHYA C
3	1SG14EE002	ABHISHEK B REVANKAR
4	1SG14EE005	AMAN KUMAR
5	1SG14EE007	AMRIT RAJ
6	1SG14EE008	ANITHA B
7	1SG14EE010	ANKIT JHA
8	1SG14EE011	ANKIT PRAKASH
9	1SG14EE012	ANKUR JAYARAJ
10	1SG14EE014	ANUSHA T S
11	1SG14EE015	ARCHANA S
12	1SG14EE017	ARPITHA M J
13	1SG14EE018	ARVIND B R
14	1SG14EE020	BIJITH K B
15	1SG14EE021	RISHAL KUMAR GUPTHA
16	1SG14EE022	BLESSY PHILIP M
17	1SG14EE023	CHANDAN KUMAR JAISWAL
18	1SG14EE024	DANAYYA CHANNAYYA
19	1SG14EE025	DILIP M
20	1SG14EE026	DIVYA M
21	1SG14EE027	DIVYANSHU MISHRA
22	1SG14EE028	GANESH KUMAR T C
23	1SG14EE030	HEMALATHA H G
24	1SG14EE031	ISHANI SHARMA
25	1SG14EE032	JYOTHI M
26	1SG14EE034	KAVYA J R
27	1SG14EE035	KIRAN D
28	1SG14EE037	KRUTHIKA K
29	1SG14EE038	KUSHAL N
30	1SG14EE039	MADHUSHREE S
31	1SG14EE040	MAHESH KUMAR K
32	1SG14EE041	MANJUNATH
33	1SG14EE042	MANJUNATH T
34	1SG15EE400	AKHILESH B R
35	1SG15EE401	ARPITHA B G
36	1SG15EE402	ARUN S RAJ
37	1SG15EE407	DARSHAN R
38	1SG15EE408	DEEPIKA H C
39	1SG15EE409	DEVARAJA K
40	1SG15EE415	KEERTHANA A BAVASAR


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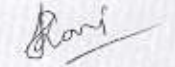
Department of Electrical and Electronics Engineering

SL.No	USN	Student Name
41	1SG15FF416	KIRAN KUMAR H
42	1SG15FF417	KRISHNA REDDY
43	1SG15FF418	MANJUNATH S
44	1SG15FF419	MANJUNATH R
45	1SG15FF420	MANJUNATH S
46	1SG15FF423	MOUNESH A KAMBAR
47	1SG13FF043	ROHIT RANJAN
48	1SG13FF055	SHASHI KUMAR
49	1SG13FF051	SATYA SUNDAR
50	1SG14FF043	MANOJ M G
51	1SG14FF044	MANOJ R
52	1SG14FF045	MEGHANA G V
53	1SG14FF047	MITHUN H V
54	1SG14FF048	NAVEEN KUMAR SHANKAR
55	1SG14FF050	NETHRAVATHI K
56	1SG14FF051	NIKHIL M G
57	1SG14FF052	PADMINI R
58	1SG14FF053	PALLAVI S
59	1SG14FF054	PAVAN KUMAR D V
60	1SG14FF055	PAVAN KUMAR H D
61	1SG14FF056	PAVITHRA C
62	1SG14FF057	PAVITHRA N M
63	1SG14FF058	POORVA H
64	1SG14FF059	PRAGATHI S
65	1SG14FF061	RAKSHITH S
66	1SG14FF062	RAMKUMAR R P
67	1SG14FF064	RANJITHA K
68	1SG14FF065	RAVIKIRAN H
69	1SG14FF066	RITU KUMARI
70	1SG14FF067	SADAM HUSSAIN K A
71	1SG14FF068	SANIYA ANJUM P
72	1SG14FF070	SHILPA H S
73	1SG14FF072	SNEHA S
74	1SG14FF073	SOWBHAGYA S
75	1SG14FF074	SRINIVAS J
76	1SG14FF075	SUMANRAJ
77	1SG14FF076	SUMATHI G
78	1SG14FF077	SUSHMAR
79	1SG14FF078	SUSHMITHA I
80	1SG14FF080	TEJAS S
81	1SG14FF081	UPENDRA R
82	1SG14FF083	VADDIREDDY JAYA SATYA
83	1SG14FF084	VIKRANT KUMAR PANDEY
84	1SG14FF085	VISHWANATH M
85	1SG15FF424	KAGARAJU H

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SL.No	USN	Student Name
86	1SG15EE425	NAGENDRA R GOUTHAMAS
87	1SG15EE427	NANDEESH C
88	1SG15EE428	NEHA
89	1SG15EE430	PARAMESH H.S
90	1SG15EE432	SANDESH R
91	1SG15EE436	SHANTHI PRIYA S.J
92	1SG15EE437	SHREEJA T
93	1SG15EE438	SINDHU K P
94	1SG15EE442	SUNIL B.G
95	1SG15EE443	SLASHMA K P
96	1SG15EE444	TEJASH B.N
97	1SG15EE448	UMESHA K.S
98	1SG15EE450	VAJUN KUMAR G


(Program Coordinator)



HOD

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5 days Certification Program on

"Design of External Insulation from Permanent AC Voltage"

Attendance

Academic Year:2017-18(EVEN)

Sl. No	USN	Student Name	25-01-2018		27-01-2018		29-01-2018		30-01-2018		31-01-2018		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
1	1SG13EE015	CHANDAN KUMAR	1	2	3	4	5	6	7	8	8	9	10
2	1SG13EE048	SANDHYA C	1	2	3	4	5	6	7	8	9	10	11
3	1SG14EE002	ABHISHEK B F EVANKAR	1	2	3	4	5	6	7	8	9	10	11
4	1SG14EE005	AMAN KUMAR	1	2	3	4	5	6	7	8	9	10	11
5	1SG14EE007	AMRIT RAJ	1	1	2	3	4	5	6	7	8	9	10
6	1SG14EE008	ANITHA B	1	2	3	4	5	6	7	8	9	10	11
7	1SG14EE010	ANKIT JHA	1	2	3	4	5	6	7	8	9	10	11
8	1SG14EE011	ANKIT PRAKASH	1	2	3	4	5	6	7	8	9	10	11
9	1SG14EE012	ANKUR JAYARAJ	1	2	3	4	5	6	7	8	9	10	11
10	1SG14EE014	ANUSHA T S	1	2	3	4	5	6	7	8	9	10	11
11	1SG14EE015	ARCHANA S	1	2	3	3	4	5	6	7	8	9	10
12	1SG14EE017	ARPITHA M J	1	2	3	3	4	5	6	7	8	9	10
13	1SG14EE018	ARVIND B R	1	2	3	4	5	6	7	8	9	10	11
14	1SG14EE020	BIJITH K B	1	1	2	3	4	5	6	7	7	8	9
15	1SG14EE021	BISHAL KUMAR GUPTHA	1	2	3	4	5	6	7	8	9	10	11
16	1SG14EE022	BLESSY PHILIP M	1	2	3	4	5	6	7	8	9	10	11
17	1SG14EE023	CHANDAN KUMAR JAISWAL	1	2	3	4	5	6	7	8	9	10	11
18	1SG14EE024	DANAYYA CHANNAYYA HIREMAT	1	2	3	4	5	6	7	8	9	10	11
19	1SG14EE025	DILIP M	1	2	3	4	5	6	7	8	9	10	10
20	1SG14EE026	DIVYA M	1	2	3	4	4	5	6	7	8	9	10
21	1SG14EE027	DIVYANSHU MISHRA	1	2	3	4	5	6	7	8	9	10	11
22	1SG14EE028	GANESH KUMAR T C	1	2	3	4	5	6	7	8	9	10	11
23	1SG14EE030	HEMALATHA H G	1	2	3	4	5	6	7	8	9	10	11
24	1SG14EE031	ISHANI SHARMA	1	2	3	4	5	6	7	8	9	10	11
25	1SG14EE032	JYOTHI M	1	2	3	4	5	6	7	8	9	10	11
26	1SG14EE034	KAVYA J R	1	2	3	4	5	6	7	8	9	10	11
27	1SG14EE035	KIRAN D	1	2	3	4	5	6	7	8	9	10	11
28	1SG14EE037	KRUTHIKA K	1	2	3	4	5	6	7	8	9	10	11
29	1SG14EE038	KUSHAL N	1	2	3	4	5	6	7	8	9	10	11
30	1SG14EE039	MADHUSHREE S	1	2	3	4	5	5	6	7	7	8	9
31	1SG14EE040	MAHESH KUMAR K	1	2	3	4	5	6	7	8	9	10	10
32	1SG14EE041	MANJUNATH	1	2	3	4	5	6	6	7	8	9	10
33	1SG14EE042	MANJUNATH T	1	2	3	4	5	6	6	7	8	9	10
34	1SG15EE400	AKHILESH B R	1	2	3	3	4	5	6	7	8	9	10
35	1SG15EE401	ARPITHA B G	1	2	3	4	5	6	7	8	9	10	11
36	1SG15EE402	ARUN S RAJ	1	2	3	4	5	6	7	8	9	10	11
37	1SG15EE407	DARSHAN R	1	2	3	4	5	6	7	8	9	10	11
38	1SG15EE408	DEEPIKA H C	1	2	3	4	5	6	7	8	9	10	11
39	1SG15EE409	DEVARAJA K	1	2	3	4	5	6	7	8	9	10	11
40	1SG15EE415	KEERTHANA A BAVASAR	1	2	3	4	5	6	7	8	9	10	11
41	1SG15EE416	KIRAN KUMAR H	1	2	3	4	5	6	7	8	9	10	11

Sl. No	USN	Student Name	25-01-2018		27-01-2018		29-01-2018		30-01-2018		31-01-2018		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
42	1SG15EE417	KEISHNA REDDY	1	2	3	4	5	6	7	8	9	10	11
43	1SG15EE418	MANJUNATH S	1	2	3	4	5	6	7	8	9	10	11
44	1SG15EE419	MANJUNATH R	1	2	3	4	5	6	7	8	9	10	11
45	1SG15EE420	MANJUNATH S	1	2	3	4	5	6	7	8	9	10	11
46	1SG15EE423	MCUNESH A KAMBAR	1	2	3	4	5	6	7	8	9	10	11
47	1SG13EE046	ROHIT RANJAN	1	2	3	4	5	6	7	8	9	10	11
48	1SG13EE055	SHASHI KUMAR	1	2	3	4	5	6	7	8	9	10	11
49	1SG13EE051	SATYA SUNDAR BASUMATARY	1	2	3	4	5	6	7	8	9	10	11
50	1SG14EE043	MANOJ M G	1	2	3	4	5	6	7	8	9	10	11
51	1SG14EE044	MANOJ R	1	2	3	4	5	6	7	8	9	10	11
52	1SG14EE045	MEGHANA G V	1	2	3	4	5	6	7	8	9	10	11
53	1SG14EE047	MITHUN H V	1	2	3	4	5	6	7	8	9	10	11
54	1SG14EE048	NAVEEN KUMAR SHANKAR NAIK	1	2	3	4	5	6	7	8	9	10	11
55	1SG14EE050	NETRAVATHI K	1	2	3	4	5	6	7	8	9	10	11
56	1SG14EE051	NIKHIL M G	1	2	3	4	5	6	7	8	9	10	11
57	1SG14EE052	PADMINI R	1	2	3	4	5	6	7	8	9	10	11
58	1SG14EE053	PALLAVI S	1	2	3	4	5	6	7	8	9	10	11
59	1SG14EE054	PAVAN KUMAR D V	1	2	3	4	5	6	7	8	9	10	11
60	1SG14EE055	PAVAN KUMAR H D	1	2	3	4	5	6	7	8	9	10	11
61	1SG14EE056	PAVITHRA C	1	2	3	4	5	6	7	8	9	10	11
62	1SG14EE057	PAVITHRA N M	1	2	3	4	5	6	7	8	9	10	11
63	1SG14EE058	POOJA H	1	2	3	4	5	6	7	8	9	10	11
64	1SG14EE059	PRAGATHI S	1	2	3	4	5	6	7	8	9	10	11
65	1SG14EE061	RAKSHITH S	1	2	3	4	5	6	7	8	9	10	11
66	1SG14EE062	RAMKUMAR R P	1	2	3	4	5	6	7	8	9	10	11
67	1SG14EE064	RANJITHA K	1	2	3	4	5	6	7	8	9	10	11
68	1SG14EE065	RAVIK RAN H	1	2	3	4	5	6	7	8	9	10	11
69	1SG14EE066	RITU KUMARI	1	2	3	4	5	6	7	8	9	10	11
70	1SG14EE067	SADAM HUSSAIN K A	1	2	3	4	5	6	7	8	9	10	11
71	1SG14EE068	SANIYA ANJUM P	1	2	3	4	5	6	7	8	9	10	11
72	1SG14EE070	SHILPA H S	1	2	3	4	5	6	7	8	9	10	11
73	1SG14EE072	SNEHA S	1	2	3	4	5	6	7	8	9	10	11
74	1SG14EE073	SOWBHAGYA S	1	2	3	4	5	6	7	8	9	10	11
75	1SG14EE074	SRINIVAS J	1	2	3	4	5	6	7	8	9	10	11
76	1SG14EE075	SUMANRAJ	1	2	3	4	5	6	7	8	9	10	11
77	1SG14EE076	SUMATHIL G	1	2	3	4	5	6	7	8	9	10	11
78	1SG14EE077	SUSHMA R	1	2	3	4	5	6	7	8	9	10	11
79	1SG14EE078	SUSHMATHA I	1	2	3	4	5	6	7	8	9	10	11
80	1SG14EE080	TEJAS S	1	2	3	4	5	6	7	8	9	10	11
81	1SG14EE081	UPENDRA R	1	2	3	4	5	6	7	8	9	10	11
82	1SG14EE083	VADDIREDDY JAYA SATYA	1	2	3	4	5	6	7	8	9	10	11
83	1SG14EE084	VIKRANT KUMAR PANDEY	1	2	3	4	5	6	7	8	9	10	11
84	1SG14EE086	VISHWANATH M	1	2	3	4	5	6	7	8	9	10	11
85	1SG15EE424	NAGARAJU H	1	2	3	4	5	6	7	8	9	10	11
86	1SG15EE425	NAGENCRA R GOUTHAMAS	1	2	3	4	5	6	7	8	9	10	11
87	1SG15EE427	NANDEESH C	1	2	3	4	5	6	7	8	9	10	11

Sl. No	USN	Student Name	25-01-2018		27-01-2018		29-01-2018		30-01-2018		31-01-2018		
			MS	AS	MS	AS	MS	AS	MS	AS	MS	AS	Test
88	1SG15EE428	NEHA	1	2	3	4	5	6	7	8	9	10	11
89	1SG15EE430	PARAMESH H S	1	2	3	4	5	6	7	8	9	10	11
90	1SG15EE432	SANDESH R	1	2	3	4	5	6	7	8	9	10	11
91	1SG15EE436	SHANTHI PRIMA S.J	1	2	3	4	5	6	7	8	9	10	11
92	1SG15EE437	SHREEJA T	1	2	3	4	5	6	7	8	9	10	11
93	1SG15EE438	SINDHU K P	1	2	3	4	5	6	7	8	9	10	11
94	1SG15EE442	SUNIL B G	1	2	3	4	5	6	7	8	9	10	11
95	1SG15EE443	SUSHMA K P	1	2	3	4	5	6	7	8	9	10	11
96	1SG15EE444	TEJASH B N	1	2	3	4	5	6	7	8	9	10	11
97	1SG15EE448	UMESHA K S	1	2	3	4	5	6	7	8	9	10	11
98	1SG15EE450	VARUN KUMAR G	1	2	3	4	5	6	7	8	9	10	11
		Signature	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR	PR

Deep
Sneha G
Program Coordinator

(Signature)
HOD
PROF & HOD
Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bangalore - 560057.

(Signature)
Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057



Sapthagiri College of Engineering

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Department of Electrical & Electronics Engineering

5 days Certification Course on "The Design Of External Insulation

From Permanent Ac Voltage"

Test Time Table

Sl. No.	DATE	DAY	TIMINGS
1	31-01-2018	Wednesday	4.00PM-5.00PM

HOD,EEE

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Sapthagiri College of Engineering
Bengaluru - 560057.

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Department of Electrical & Electronics Engineering

5 days Certification Course on

"The Design Of External Insulation From Permanent Ac Voltage"

Question Paper

Duration: 1hr

Maximum marks: 20

Answer all the questions

Q1. Which type of insulator is used on 132 kV transmission lines?

- a. Pin type.
- b. Disc type.
- c. Shackle type.
- d. Pin and shackle type.

Q2. Where is the strain type insulators used?

- a. At dead ends.
- b. At any intermediate anchor tower.
- c. On straight runs.
- d. Either (a) or (b).

Q3. Porcelain is produced by firing at high temperature of which all mixtures?


- a. Kaolin
- b. Feldspar
- c. Quartz
- d. All of these.

Q4. What is the dielectric strength of porcelain?

- a. 55 kV/cm.
- b. 60 kV/cm.
- c. 75 kV/cm.
- d. 80 kV/cm.

Q5. Why is the wavy structure of pin insulators used?

- a. Increases mechanical strength.
- b. Increases puncture strength.
- c. Increases flash over voltage.
- d. Increases thermal strength.


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Q6. The number of discs in a string of insulators for 400 kV ac overhead transmission line lies in the range of

- a. 32 – 33
- b. 22 – 23
- c. 15 – 16
- d. 9 – 10

Q7. Insulators can be easily charged by

- a. supplying electrons
- b. EMF
- c. friction
- d. protons

Q8. Current cannot flow through an insulator because they have

- a. no free electrons
- b. free electrons
- c. no free protons
- d. free neutrons

Q9. Induced charge on insulators

- a. resides on surface
- b. move inside
- c. change into electric current
- d. moves outwards

Q10. Value of resistance in insulators is

- a. small
- b. large
- c. zero
- d. cannot be determined

Q11. The string efficiency of the insulator can be increased by

- a. Increasing the number of strings in the insulator
- b. Increasing ratio, capacity to earth/capacity per insulator
- c. Correct grading of the various capacitances
- d. Reducing the number of strings

Q12. The dielectric strength of the air barometric pressure of 76 cm and 25°C is



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- a. 30 KV per meter
- b. 21.1 KV r.m.s. per cm
- c. 21.1 KV r.m.s. per cm
- d. 21.1 KV per cm

Q13. In case of parallel wires the visual corona begins

- a. At disruptive critical voltage
- b. At visual critical voltage which is higher than disruptive critical voltage
- c. At lower voltage than disruptive critical voltage
- d. None of the above

Q14. What is the value of the wave front and the wave tail of the standard lightning impulse wave used in the impulse voltage withstand test?

- a. 50 μ sec and 1.2 μ sec.
- b. 1.2 μ sec and 50 μ sec.
- c. 50 μ sec and 2.1 μ sec.
- d. 2.1 μ sec and 50 μ sec.

Q15. At what angle is the water sprayed on the insulator in 50 cycle wet test?

- a. 35 °C
- b. 40 °C
- c. 45 °C
- d. 50 °C

Q16. AC voltage controllers convert

- a. fixed ac to fixed dc
- b. variable ac to variable dc
- c. fixed ac to variable ac
- d. variable ac to fixed ac

Q17. In AC voltage controllers the

- a. variable ac with fixed frequency is obtained
- b. variable ac with variable frequency is obtained
- c. variable dc with fixed frequency is obtained
- d. variable dc with variable frequency is obtained

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Q18. Earlier than the semiconductor technology, _____ devices were used for voltage control applications.

- a. cycloconverters
- b. vacuum tubes
- c. tap changing transformer
- d. induction machine

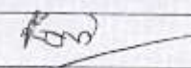
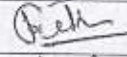

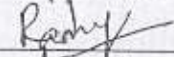
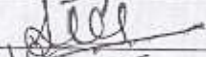
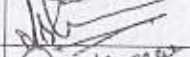
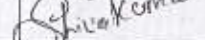
Q19. The AC voltage controllers are used in _____ applications.

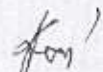
- a. power generation
- b. electric heating
- c. conveyor belt motion
- d. power transmission

Q20. In the principle of phase control

- a. the load is on for some cycles and off for some cycles
- b. control is achieved by adjusting the firing angle of the devices
- c. control is achieved by adjusting the number of on off cycles
- d. control cannot be achieved.

Approved by Academic Committee Members & HOD

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	
7	Dr Shivakumar Aradya	Guest Speaker	


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Department of Electrical & Electronics Engineering

5-days Certification Course on

"The Design Of External Insulation From Permanent Ac Voltage"

Solutions for the Questions

Duration : 1hr

Maximum marks : 20

Answers

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

Approved by Academic Committee Members & HOD

Sl No.	Faculty Name	Designation	Signature
1	Dr. K N Ravi	HOD	
2	Prof. Rekha S N	Associate Professor	
3	Prof. Dhamodaran A	Assistant Professor	
4	Prof. Ramya M	Assistant Professor	
5	Prof. Swetha G	Assistant Professor	
6	Prof. Ashwini AV	Assistant Professor	

HOD EEE

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Sapthagiri College of Engineering
Bengaluru - 560057.

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesareghatta Main Road
Bengaluru - 560 057

5 days Certification Course on

"The Design Of External Insulation From Permanent Ac Voltage"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) Good d) Excellent
4. Effectiveness of the Hands-on Sessions
a) Poor b) Satisfactory c) Good d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) Good d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent

8. Any Suggestions:

Test conduction was excellent.
Overall topic explained was excellent

Student Name :

Jyothi M

Student Signature:

Jyothi M

5 days Certification Course on

"The Design Of External Insulation From Permanent Ac Voltage"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) ☒ Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) ☒ Good d) Excellent
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a) Poor b) Satisfactory c) Good d) ☒ Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ☒ Excellent
8. Any Suggestions:

All topics explained so well, I understand well.
Test conduction was good.

Student Name : S SNEHA

Student Signature: 

5 days Certification Course on

"The Design Of External Insulation From Permanent Ac Voltage"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
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a) Poor b) Satisfactory c) Good d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) Good d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) Excellent
8. Any Suggestions:

Expert explained very well all the topics
overall it is nice.

Student Name : Maryunath T

Student Signature: Maryunath T

5 days Certification Course on

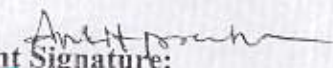
"The Design Of External Insulation From Permanent Ac Voltage"

Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) ☒ Good d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) ☒ Good d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) ☒ Good d) Excellent
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a) Poor b) Satisfactory c) ☒ Good d) Excellent
5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) Good d) ☒ Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) Good d) ☒ Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good d) ☒ Excellent
8. Any Suggestions:

It was nice / all topic explained very well
we need more certificate course in future

Student Name : Ankit prakash

Student Signature: 


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5 days Certification Course on
"The Design Of External Insulation From Permanent Ac Voltage"
Participant Feedback

1. How was the overall organization of the Certification Course ?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
2. How appropriate were the facilities provided ?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
3. Opportunity to ask questions for clarification and interaction with presenters
a) Poor b) Satisfactory c) Good ☒ d) Excellent
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5. Topic and contents of the Certification Course
a) Poor b) Satisfactory c) Good ☒ d) Excellent
6. How do you rate the Certification Course compared to other workshops that you have attended ?
a) Poor b) Satisfactory c) Good ☒ d) Excellent
7. Generally how was your overall experience during the Certification Course
a) Poor b) Satisfactory c) Good ☒ d) Excellent
8. Any Suggestions:

Overall it's good. Topic explained in understandable manner. Test conduction was good.

Student Name : Devaraja K.

Student Signature: Devaraja K.

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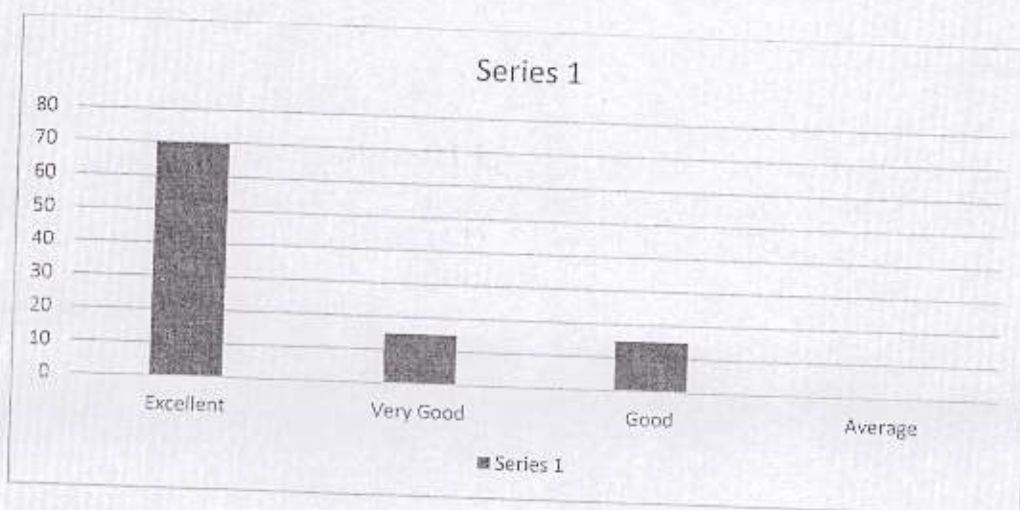
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Department of Electrical & Electronics Engineering

FEEDBACK ANALYSIS

Certification Programme: "The Design of External Insulation from Permanent Ac Voltage"

No. of students participated	Student Feedback			
	Excellent	Very Good	Good	Average
98	70	15	15	0

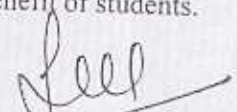


Action Report:

85 % of students were completely happy with the certification program and 10 % of students felt it was a good program and remaining 5 % students were satisfied with the program.

Action Taken:

The Feedback report which was collected from the students were sent to the principal and he would take necessary actions based on the comments and conduct more programs for the benefit of students.


Program Coordinator


HOD

PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
Bengaluru - 560057.


Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057




Sapthagiri College of Engineering


Bangalore-560057

Certificate

This is to Certify that Mr./Ms. DIVYA - M 1SG14EE026
Of EEE has participated
and successfully completed Five days Certification Course on *“Design of External
Insulation From Permanent AC Voltage”* from 25th Jan, 2018 to 31st Jan, 2018
organized by the Department of Electrical & Electronics Engineering, Sapthagiri College
of Engineering.


HOD, Dept. of EEE


Principal
Sapthagiri College of Engineering
14/5, Chikkaasandra, Hesarghatta Main Road
Bangaluru - 560 057


Principal



Sapthagiri College of Engineering


Bangalore-560057

Certificate

This is to Certify that Mr./Ms. _____

Of _____ has participated
and successfully completed Five days Certification Course on ***“Design of External
Insulation From Permanent AC Voltage”*** from 25th Jan, 2018 to 31st Jan, 2018
organized by the Department of Electrical & Electronics Engineering, Sapthagiri College
of Engineering.

HOD, Dept. of EEE


Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hosuraghatta Main Road
Bengaluru - 560 057

Principal




Sapthagiri College of Engineering

Bangalore-560057

Certificate

This is to Certify that Mr./Ms. KIRAN D 15914EE035
Of EEE has participated
and successfully completed Five days Certification Course on "*Design of External
Insulation From Permanent AC Voltage*" from 25th Jan, 2018 to 31st Jan, 2018
organized by the Department of Electrical & Electronics Engineering, Sapthagiri College
of Engineering.


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Department of Electrical & Electronics Engineering

Certificate Course Report

Department of EEE conducted Certificate Course on "The Design of External Insulation from Permanent Ac Voltage".

Guest Speaker: Dr Shiva Kumar Aradya, Professor, Acharya College of Engineering Bangalore-560090.

Duration of the course: five days from Jan 25th 2018 to Jan 31st 2018

Course detail

Objective of the Course: The five day course made the students to be familiar with the **this** course students will discuss the performance of insulators under polluted condition is a subject of increasing interest in many countries and is, accordingly, an important aspect of the research programme for power engineering. Insulation contamination is found to be a major cause of transmission line outages. Several organizations like CIGRE(Working Group 33.04), IEEE (Working group on Insulator Contamination) have therefore set up permanent working groups to undertake large scale laboratory and field investigations on pollution flashover of insulators, to establish test procedures and to suggest guide lines for the selection of insulators in pollution prone areas.

The course will develop and enhance an understanding of what is involved in the maintenance of these essential components of the power systems, through the tips and tricks learnt and developed by some of the world's pre-eminent electrical engineers. Marine pollution may be found not only in the immediate neighborhood of the sea, but also at considerable distance from the coast, where the effect of strong winds from the sea is felt. Detail safe working procedures in switch rooms, indoor and outdoor substations. Draw up simple operational policies for safety rules

Certificate course made them comfortable with the Design of External Insulation from Permanent Ac Voltage. Learning style adopted by students, which eventually is developed into a skill of their forte. Through this course, an ecstatic learning background paved way to a positive learning environment in the class where active participation was seen from every end. Faculty took the onus of interacting with the students personally to navigate them for the academic transition by becoming the guides by their side

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Schedule of Certification Course

Dates	SESSION 1 (9.00am-10.30am)	SESSION 2 (11.00am-12.30pm)	SESSION 3 Hands-on Session (1.00pm-4.00pm)	No. of Hours
25-01-2018 Thursday	Introduction Mechanism Of Flashover Under Pollution	Mathematical models Experimentally based AC models	Hands on Pollution Test Methods	6
27-01-2018 Saturday	<ul style="list-style-type: none"> • rvey of experimental results • Influence of the degree of pollution • Influence of the geometrical characteristics of the insulator 	<ul style="list-style-type: none"> • Influence of contaminant uniformity • Influence of contaminant characteristics • Solid layer method 	<ul style="list-style-type: none"> • Hands on test methods Salt fog method 	6
29-01-2018 Monday	<ul style="list-style-type: none"> • Statistical approach • Semi-statistical approach • Deterministic approach 	<ul style="list-style-type: none"> • Qualitative, service-based approach • Influence of non standard test conditions, 	<ul style="list-style-type: none"> • Hands on Discussion of the validity of test results 	6
30-01-2018 Tuesday	<ul style="list-style-type: none"> • Remedies Used In Service • To Reduce The Severity Due Pollution 	<ul style="list-style-type: none"> • Principles of safety rules • Principles of personal authorization 	<ul style="list-style-type: none"> • Hands on Laboratory test results: test method 	6
31-01-2018 Wednesday	<ul style="list-style-type: none"> • Influence of the length of the insulator • Influence of contamination uniformity • Insulator : cap and pin standards 	<ul style="list-style-type: none"> • Influence of the geometrical characteristics of the insulator, • solid layer according to 22% relation between 50% flashover • voltage and insulator length 	<ul style="list-style-type: none"> • Hands on arc models and Test Conduction 	6
Total				30


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Conclusion: Certificate course made them comfortable with practical knowledge. Learning style adopted by students, which eventually is developed into a skill of their forte. Through this course, an ecstatic learning background paved way to a positive learning environment in the class where active participation was seen from every end. Faculty took the onus of interacting with the students personally to navigate them for the academic transition by becoming the guides by their side.

It is a practice of the department to take care of any issues pertaining to the academics. In this connection department of EEE has conveyed meeting with Faculty members to discuss about any lapses with academic activities and felt the need to conduct a certificate Course. As part of Certificate course 4 faculty members were identified and assigned duties and responsibilities to carry out the Certificate course.



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Department of Electrical & Electronics Engineering



HOD, EEE

[Signature]
PROF & HOD

Department of Electrical & Electronics Engineering
Sapthagiri College of Engineering
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