



**SAMANTA CHANDRASEKHAR INSTITUTE  
OF TECHNOLOGY & MANAGEMENT**  
SEMILIGUDA-764 036, KORAPUT

DEPT. OF..... ELECTRICAL.....

**LESSON PLAN AND PROGRESS REGISTER**

(To be maintained by all members of the teaching staff)

SESSION... 2022-2023 ( 4<sup>TH</sup> - GTD  
6<sup>TH</sup> - SGPD )

NAME Anita Pradhan  
DESIGNATION H.O.D  
DEPT. Electrical

Anita Pradhan  
SIGNATURE

## LESSON PLAN

Degree/Diploma/+2 Scie  
(Theory/Pract/Lab/Workst)

Semester

6<sup>th</sup>

Branch

Electrical

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Class Requir
	TH-2.	INTRODUCTION TO SWITCHGEAR	
13/02/23	1.1)	Switchgear equipment Bus Bar arrangement.	01
14/02/23		-> Switch gear.	
15/02/23		accomodation.	01
16/02/23		-> Symmetrical faults	
17/02/23		in 3-phase system	
20/02/23		-> Short-ckt faults	
		in Power System	
23/02/23		-> Limitation of Fault current	
24/02/23		-> Percentage reactance & Base KVA	
27/02/23		-> Short-ckt KVA	
28/02/23		-> Reason. control of Short-ckt currents	
01/03/23		-> Location of Reasons.	
02/03/23		-> Steps for Symmetrical fault	
03/03/23		-> calculation	
06/03/23		-> Numerical Problems	
		FUSES	
09/03/23		-> Desirable characteristic of fuse element.	

# PROGRESS

Degree/Diploma/+2 Science  
(Theory/Pract/Lab/Workshop)

Semester 6<sup>th</sup> Branch Electrical

Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director
5/5/23	T11-2	05	→ Essential features of switch gear → Switch gear equipment Bus Bar arrangement → Switch gear accommodation		
14/07/23		05	→ Short Ckt faults in Power System.		
15/7/23		07	→ Symmetrical faults in a 3-phase system.		
			→ Limitation of fault current.		
20/7/23		08	→ Percentage reactance & Base KVA.		
			→ Problems.		
25/7/23		08	→ Short Ckt KVA.		
			→ Reaction control of Short Ckt currents.		
28/7/23		08	→ Location of Reactors.		
01/03/23		09	→ Steps of Symmetrical fault calculation.		

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Semester 6<sup>th</sup> Branch Electrical

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
		→ Fuse element materials	
10/03/23		→ Types of fuses &	01
		→ Important terms.	
13/03/23		→ Low voltage fuse.	01
14/03/23		→ High Voltage Fuse.	01
15/03/23		→ Current carrying capacity &	01
		→ Fuse element.	
16/03/23		→ Difference between fuse & CB.	01
17/03/23		→ Definition & principle of CB.	01
20/03/23		→ ARC Phenomenon.	01
		→ ARC Extinction.	
21/03/23		→ Arc voltage Re-striking voltage	01
		→ CB classification.	
		→ OCB & its classification.	
21/03/23		→ Plain Break & OCB	01

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Degree/Diploma/+2 Science  
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Semester \_\_\_\_\_

6<sup>th</sup>

Branch \_\_\_\_\_

Electrical

Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director
02/03/23	TH-2	06	-> Numericals.		
04/03/23		07	-> Desirable characteristics of fuse element		
			-> Fuse element materials		
7/03/23		09	-> Types of fuses		
			-> Important terms		
10/03/23		08	-> Low & High voltage fuse.		
11/03/23		07	-> Difference between FUSE & CB.		
12/03/23		06	-> Arc Phenomenon.		
			-> Arc Extinction.		
			-> Arc voltage.		
4/03/23		07	-> Re-striking voltage.		
5/03/23		07	-> CB classification.		

# LESSON PLAN

Degree/Diploma/+2 Science  
(Theory/Pract/Lab/Workshop)

Semester 6<sup>th</sup>

Branch Electrical

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
	TH-②	-> Arc control OCB	
22/03/23		-> Low oil CB	01
		Maintenance	
23/03/23		-> Air Blast & CB classification.	01
24/03/23		-> SF <sub>6</sub> CB.	01
27/03/23		-> V CB Switch Gear component.	01
28/03/23		-> Problems of circuit Interruption.	01
29/03/23		-> Resistance switching	01
		CB Rating	
	5)	PROTECTIVE RELAYS	
31/03/23		-> Features of good protective system.	01
03/04/23		-> Primary Protection.	01
		-> Back-up Protection.	
04/04/23		-> Types of Relay.	01

# PROGRESS

Degree/Diploma/+2 Science  
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Semester		6 <sup>th</sup>		Branch		Electrical	
Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director		
14/03/23	TH-2	09	→ OCB & its classification.				
17/03/23		06	→ Plain Break OCB				
			→ Arc limited OCB				
18/03/23		06	→ Low Oil CB.				
21/03/23		06	→ Air Blast CB				
23/03/23		09	→ classification of Air Blast CB.				
24/3/23		07	→ SF <sub>6</sub> CB.				
28/3/23		08	→ VCB switch gear.				
1/3/23		07	→ Problems of circuit interruption				
			→ Resistance switching				
			→ CB Rating				



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Degree/Diploma/+2 Science  
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Semester 6<sup>th</sup> Branch Electrical

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
05/04/23	TH-2	→ Protection of feeders by overcurrent & Earth fault relay.	01
06/04/23		→ Directional relay for & its application.	01
10/04/23		→ Merz-price circulating current principle.	01
11/04/23		→ Bias Differential relay.	01
12/04/23		→ Buchholz Relay.	01
		LIGHTENING ARRESTORS.	
13/04/23		→ Lightning Arrestors	01
17/04/23		→ Surge Divertors	01
		→ Explain concept of lightning phenomenon	01
18/04/23			
19/04/23		→ Explain necessity of protection against lightning in power system.	02
20/04/23			

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Degree/Diploma/+2 Science  
(Theory/Pract/Lab/Workshop)

Semester 6<sup>th</sup>

Branch Electrical

Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director
3/3/23	TH-2	07	-> Features of good protective system		
			-> Principle of relaying, Primary & Back-up protection		
4/4/23		09			
05/4/23		05	-> Types of relay.		
			-> Protection of feeder by overcurrent &		
05/04/23		06	-> Earth Fault relay.		
19/4/23		06	-> Directional relay		
			-> Its application.		
2/4/23		08	-> Merz Price circulating current.		

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Degree/Diploma/+2 Science  
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Semester 6<sup>th</sup> Branch Electrical

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
	TH-2		
21/04/23		→ Explain principle of Horn Gap lightning arrestor.	01
24/04/23		→ Metal Oxide lightning arrestor.	01
		INTRODUCTION TO	
		STATIC RELAYS	
25/04/23		→ State advantages of Static Relays.	01
26/04/23		→ Explain instantaneous over current relay.	01
27/04/23		→ Explain the working principle.	01

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Degree/Diploma/+2 Science  
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Semester 6<sup>th</sup> Branch Electrical

Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director
	TH-2		-> Principles		
15/4/23		07	-> Bias differential relay.		
19/4/23		06	-> Buchholz relay.		
22/4/23		05	-> Lightning arrestors		
24/4/23		05	-> Surge arrestors		
25/4/23		04	-> Explain concept of lightning phenomenon		
26/4/23		04	-> Explain necessity of protection against lightning in power system.		
17/4/23		06	-> Horn Gap lightning arrestor.		



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Semester 6<sup>th</sup> Branch Electrical

Date	Course No. & Title	No. of Student Present	Mention the Topics covered	If not taken mention the reasons	Remarks/ Signature of HOD/Director
29/4/23	TH-2	01	→ Metal Oxide Type.		
			lightning		
			arrestor.		
01/05/23		03	→ Introduction		
			to Static Relays.		
02/05/23		09	→ State advantages		
			of Static Relays.		
03/05/23		09	→ State advantages		
			of Static Relays.		
05/05/23		09	→ Explain Instantaneous		
			overcurrent relay.		
06/05/23		09	→ IMDT relays		
09/05/23		09	REVISION		