

DISCIPLINE- ELECTRICAL ENGG	SEMESTER- 6 <sup>TH</sup>	NAME OF THE TEACHING FACULTY- SIBANI PANDA,LECT (ELECT)	
SUB- SGPD	NO OF CLASSES/ WEEK – 5P	TIME PERIOD- 22.12.2025 TO 18.04.2026 NO OF WEEKS- 17	
SL NO	CLASS DAY	TOPIC TO BE COVERED	REMARK
1	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	<b>3. FUSES</b> 3.1 Desirable characteristics of fuse element. 3.2 Fuse Element materials.	
2	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	3.3 Types of Fuses and important terms used for fuses. 3.4 Low and High voltage fuses.	
3	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	3.5 Current carrying capacity of fuse element. 3.6 Difference Between a Fuse and Circuit Breaker	
4	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	<b>6. PROTECTION OF ELECTRICAL POWER EQUIPMENT AND LINES</b> 6.1 Protection of alternator. 6.2 Differential protection of alternators. 6.3 Balanced earth fault protection.	
5	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	6.4 Protection systems for transformer. 6.5 Buchholz relay. 6.6 Protection of Bus bar.	
6	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	6.7 Protection of Transmission line. 6.8 Different pilot wire protection (Merz-price voltage Balance system)	
7	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	6.9 Explain protection of feeder by over current and earth fault relay.	
8	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	<b>7. PROTECTION AGAINST OVER VOLTAGE AND LIGHTING</b> 7.1. Voltage surge and causes of over voltage. 7.2. Internal cause of over voltage.	
9	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	7.3. External cause of over voltage (lighting) 7.4. Mechanism of lightning discharge.	
10	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	7.5. Types of lightning strokes. 7.6. Harmful effect of lightning.	
11	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	7.7. Lightning arresters and Type of lightning Arresters. 7.7.1. Rod-gap lightning arrester. 7.7.2. Horn-gap arrester.	
12	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	7.7.3. Valve type arrester. 7.8. Surge Absorber	
13	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	<b>8. STATIC RELAY:</b> 8. 1 Advantage of static relay.	
14	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	8. 2 Instantaneous over current relay. 8. 3 Principle of IDMT relay.	
15	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	REVISION	
16	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	REVISION	
17	1 <sup>ST</sup> DAY 2 <sup>ND</sup> DAY	REVISION	

*Sani*  
20.12.25