SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: | | | | | | | | | | | | | Total number of pages:[1]

Total number of questions: 05

M.Tech. || EE || 3rd Sem

Advanced Power System Protection

Subject Code: MELE1-369

Paper ID: (for office use)

Time allowed: 3 Hrs Max Marks: 60

Important Instructions:

- Attempt all questions
- Each question carries equal marks

Q. 1.	a) Discuss Carrier Current protection of lines. b) Discuss protection schemes of generators in detail.	CO1& CO2
	OR	
	a) What is differential relay? Discuss current differential relay in detail. b) Explain operating and restraining characteristics of differential relay.	CO1& CO2
Q. 2.	Define the term 'Static Relay'. Explain the basic components of static relay. Give advantages also.	CO1
	OR	
	What is Relay? Give its classification depending upon construction and principle of operation in detail.	CO1
Q. 3.	Explain briefly the arc extinction process in SF6.circuitbreaker. Give advantages and disadvantages of SF6 Circuit Breaker.	CO1
	OR	
	What are the types of bus bar faults? Also discuss protection schemes and modern trend in bus-bar protection.	CO1
Q. 4.	a) Briefly discuss the various relaying schemes used for protection of modern transformers. b) How a suitable relaying scheme is selected for transmission line protection?	CO1& CO2
	OR	
	Write short note on a) Applications of microwave Channels for protective relaying b) Distance Relay.	CO1& CO2
Q. 5.	What is amplitude comparator? How this can be used as a protective relay? Derive the general equation of an electromagnetic relay.	CO1
	OR	
	a) What is comparator? Differentiate between amplitude and phase comparators. b) What are the advantages of static relay over electromagnetic relay? Discuss.	CO1