GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Engineering

M.Tech Power System Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem II - G2PI201T - Advanced Power System Protection

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	What are the advantages of static relays over electromechanical relays?	K2	(2)
2)	Define static over current relay.	K1	(3)
3)	Explain the role of back-up protection? What are the various methods of providing back-up protection?	K2	(4)
4)	Draw a neat sketch of an induction disc relay and discuss its operating principle.	K2	(6)
5)	Model a numerical relay and briefly describe the functions of its various components.	K3	(6)
6)	Develop how an amplitude comparator can be converted to a phase comparator.	K3	(9)
7)	Classify and explain comparators as amplitude and phase comparators.	K4	(8)
8)	Analyse the time-current characteristics of inverse, very inverse and extremely inverse overcurrent relays. Discuss their area of applications.	K4	(12)
	OR		
	Analyse the techniques used to realize various time-current characteristics using electromechanical relays.	K4	(12)