H-1630

Total No. of Printed Pages:1

SUBJECT CODE NO:- H-1630
FACULTY OF SCIENCE AND TECHNOLOGY
M.E. (Electrical Power Systems)
Digital Protection of Power System

[Time: Three Hours]   [Max.Marks:80]

Please check whether you have got the right question paper.
N.B
      i) Solve any two questions from each section.
      ii) Assume the suitable data, whenever necessary.

Section A

Q.1	a)	What are advantages of digital protection?	10
	b)	Compare solid state relay with electromagnetic relay. With block diagram explain working of solid state relay.	10
Q.2	a)	Explain the amplitude comparator showing all input and its output.	10
	b)	Discuss the theory and basic principle of digital protection of a transmission line.	10
Q.3	a)	What are the devices used for interfacing to microprocessor? Explain each one with neat diagram.	10
	b)	Describe the cosine type phase comparator.	10

Section – B

Q.4	a)	How DSP helps in power system protection? Explain with example.	10
	b)	What are the parameters sensed to avoid unwanted Load shedding? How? Describe the realization of Load shedding scheme using microprocessor.	10
Q.5	a)	Draw and Explain PT modelling with reference to standards.	10
	b)	With the help of block diagram explain operation of numerical relay. What is multifunction numerical relay? Explain	10
Q.6	a)	What are the DSP 320 series ICs? Write its features and explain the basic architecture.	10
	b)	How the simulation of transients are done? Which tool used for it? Explain any one in detail.	10