Total No. of Printed Pages:1

SUBJECT CODE NO:- P-8165

FACULTY OF ENGINEERING AND TECHNOLOGY

M.E. (Electrical Power Systems) Examination May/June 2017

Digital Protection of Power System

(Revised)

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

Please check whether you have got the right question paper.

N.B
1. Solve any two questions from each section.
2. Assume suitable data whenever required.

Section A

Q.1	a)	Why digital protection is necessary? What are its advantages? Compare with electromechanical based protection.	10
	b)	Discuss an evolution of micro – processor and its history. What is current scenario?	10
Q.2	a)	Explain the amplitude comparator showing all input and its outputs.	10
	b)	How can A/D converter ADC 0809 be used to read any instantaneous value of ac voltages? Draw block diagram and explain.	10
Q.3	a)	Explain with neat diagram solid protection of transmission line.	10
	b)	Explain with suitable example. The electromagnetic transient program.	10

Section B

Q.4	a)	Draw & explain CT modeling.	10
	b)	How DSP helps in power system protection? Explain with example.	10
Q.5	a)	Draw & explain configuration of microprocessor based control for load shedding. Draw flow chart.	10
	b)	Explain with neat diagram solid state protection for differential relay scheme.	10
Q.6	a)	Draw & explain configuration of microprocessor based control for distance protection scheme. Draw flow chart.	10
	b)	How DFT employed for protection? What is its objective? Write Fourier representation of signals.	10