Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program:	**School of Commerce and Management**	**Department:**
Course Code: FYT107R1	**Course Title: -Elements of Electrical Engineering**	**Semester : I**
Day and Date:Friday,07.05.2021	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Instructions: 1) All Questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Answer/Solve the following (any Two)**–			
	a)	State & Explain sign conventions in KCL & KVL.	8	L1	CO1
	b)	Compare similarities and dissimilarities of electrical and magnetic circuits.	8	L2	CO1
	c)	Draw an impedance triangle & waveforms of RC series circuit? Comment on PF of circuit?	8	L1	CO2
Q.2		**Answer/Solve the following (any two)** –			
	a)	Establish relationship between line and phase voltages and currents in balanced star connected load. Draw phasor diagrams of voltage and currents.	8	L2	CO3
	b)	Establish relationship between line and phase voltages and currents in balanced delta connected load. Draw phasor diagrams of voltage and currents.	8	L2	CO3
	c)	Explain the necessity of earthing of electrical equipments and installation?	8	L2	CO3
Q.3		**Answer/Solve the following (any two)** –			
	a)	State the principle on which transformer works? Describe with neat sketch core type of transformer and shell type transformer?	9	L2	CO4
	b)	Explain the different losses taking place in transformer. Where do they occur? How to reduce these losses?	9	L2	CO4
	c)	Define efficiency and regulation of Transformer. Briefly explain direct loading method for voltage regulation with neat diagram.	9	L1	CO4

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