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: FY-B.Tech	School of Technology	Department: FY-B.Tech
Course Code: FYT106R1	Course Title: Elements of Electronics Engineering	Semester : I
Day and Date:	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)	Define Rectifier and with neat diagram & waveforms explain the working principle of Full wave rectifier configuration	8	L_1	CO1
b)	With the help of neat circuit diagram and input-output characteristics, explain the working of BJT (NPN) Common Emitter configuration.	8	L_2	CO1
c)	With the help of neat diagram, explain the method for measuring Displacement using LVDT.	8	L_2	CO2
Q.2	**Answer/Solve the following (any two)** –*Unit III*			
a)	Explain the working of Op-amp with block diagram explanation along with ideal Op-amp properties.	8	L_2	CO3
b)	With the help of neat circuit diagram and derivation, explain the working of Op-amp as a Adder.	8	L_2	CO3
c)	With the help of neat circuit diagram, derivation and waveform, explain the working of op-amp as a Integrator.	8	L_2	CO3
Q.3	**Answer/Solve the following (any two)** –*Unit IV*			
a)	Classify different types of Logic Gates and explain them with its Boolean equation, truth table and symbol.	9	L_3	CO4
b)	Compare Simplex, Half Duplex and Full Duplex communication techniques with proper diagram and examples.	9	L_2	CO4
c)	Solve the following	9	L_3	CO4

a) $(10111.01)_2 \rightarrow (?)_8$
b) $(17.17)_8 \rightarrow (?)_{10}$
c) $(11.375)_{10} \rightarrow (?)_2$
d) $(111011.11111)_2 \rightarrow (?)_{16}$

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