Reg. No.:

Name :



Mid-Term Examinations – November 2021

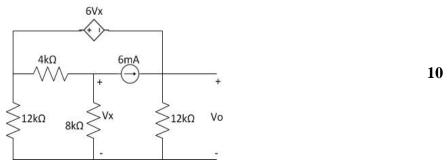
Programme	: B.Tech [BAC,BAI,BAS,BCE,BCG,BEC,BHI,	Semester	:	Fall 2021-22
	BME,BMR,BOE,BSA]			
Course	: Electric Circuits and Systems	Code	:	EEE1001
Faculty	: Dr. Baldev Swamy	Slot/ Class No.	:	B21+B22+B23/0082
Time	: 1 ½ hours	Max. Marks	:	50

Answer all the Questions

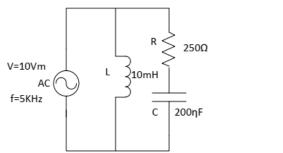
Q.No.

Question Description

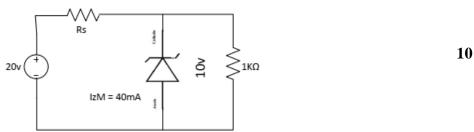
1 Solve the given below network circuit by using Mesh analysis to find V₀ and V_x and also find the voltage across each resistor element?



2 Calculate the values of total current I and voltage across the each element (R,L,C) of the below circuit?



3 Calculate the minimum and maximum values of the series resistance Rs of the below circuit, IzM is zener maximum current?

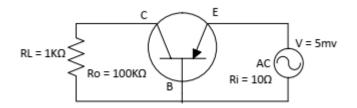


Evaluate the voltage gain of the given below circuit by using the CB configuration and consider the alpha (α) value is 1?

10

10

Marks



5 Implement the following Boolean function $f(a, b, c) = \sum (1, 2, 6, 7)$ by using 4:1 Mux.

 $\Leftrightarrow \Leftrightarrow \Leftrightarrow$

10