Diode & Transistor Study Guide

Questions 1-7, Are the diodes Forward or Reverse Biased?

1) 

2) 

3) 

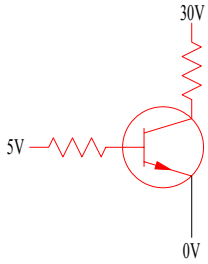
4) 

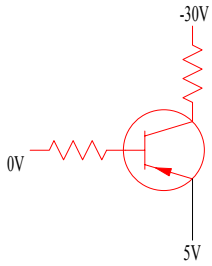
5) 

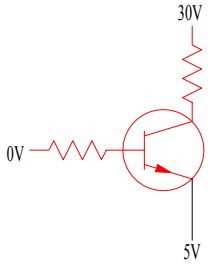
6) 

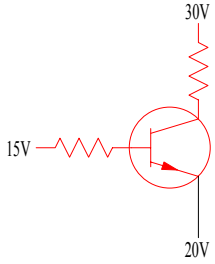
7) 

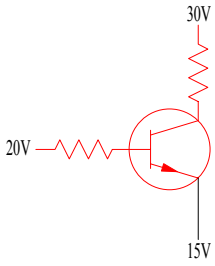
Questions 8-14, Are the transistors On or Off?

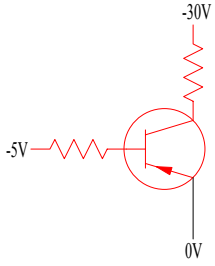
8) 

9) 

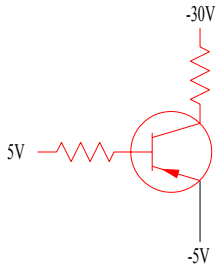
10) 

11) 

12) 

13) 

14)



15) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #8.

E=_____B=_____C=_____

16) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #9.

E=_____B=_____C=_____

17) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #10.

E=_____B=_____C=_____

18) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #11.

E=_____B=_____C=_____

19) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #12.

E=_____B=_____C=_____

20) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #13.

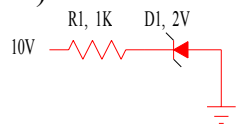
E=_____B=_____C=_____

21) Give the voltages, referenced to ground, at the Emitter, Base and Collector for problem #14.

E=_____B=_____C=_____

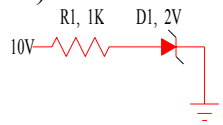
Fill in the Voltage and Current tables for the following problems:

22)



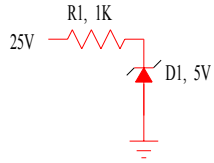
	R1	D1
E		
I		

23)



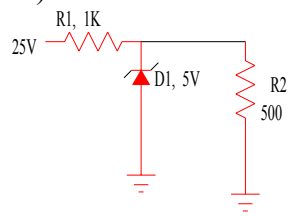
	R1	D1
E		
I		

24)



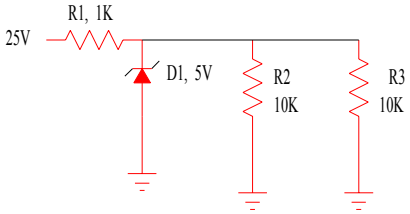
	R1	D1
E		
I		

25)



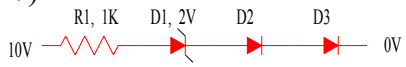
	R1	R2	D1
E			
I			

26)



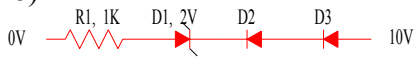
	R1	R2	R3	D1
E				
I				

27)



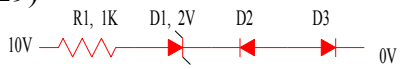
	R1	D1	D2	D3
E				
I				

28)



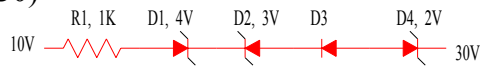
	R1	D1	D2	D3
E				
I				

29)



	R1	D1	D2	D3
E				
I				

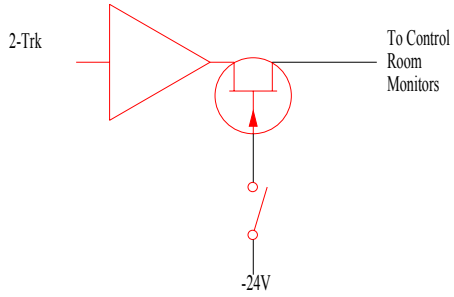
30)



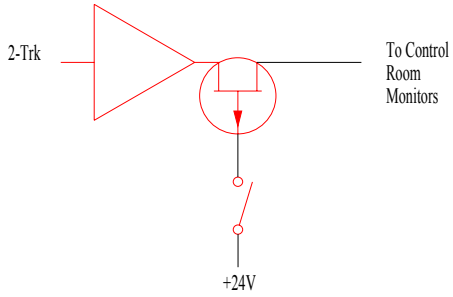
	R1	D1	D2	D3	D4
E					
I					

In the following problems, audio from a 2-trk device is going through a circuit then on to the control room monitor speakers. Tell me if you can hear the audio. (Yes/No)

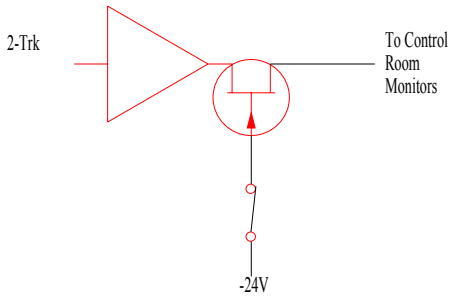
31)



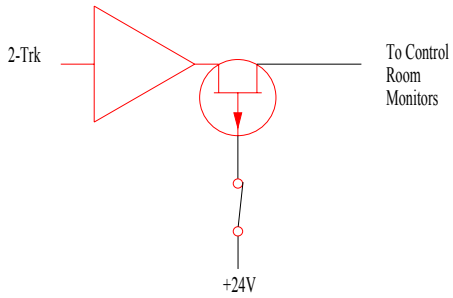
32)



33)

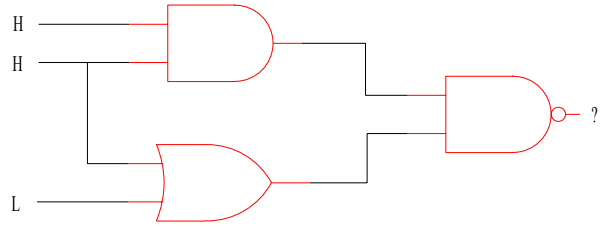


34)

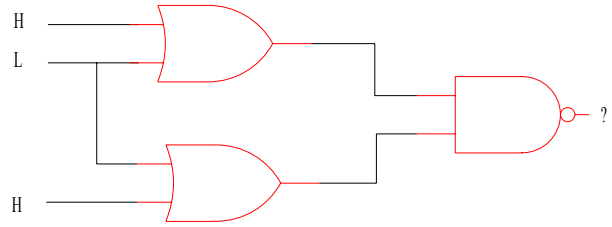


For problems 35-37, Is the output of the circuit High or Low? (H/L)

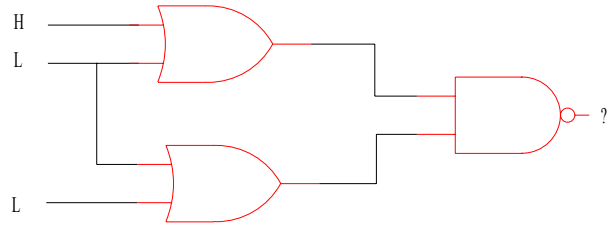
35)



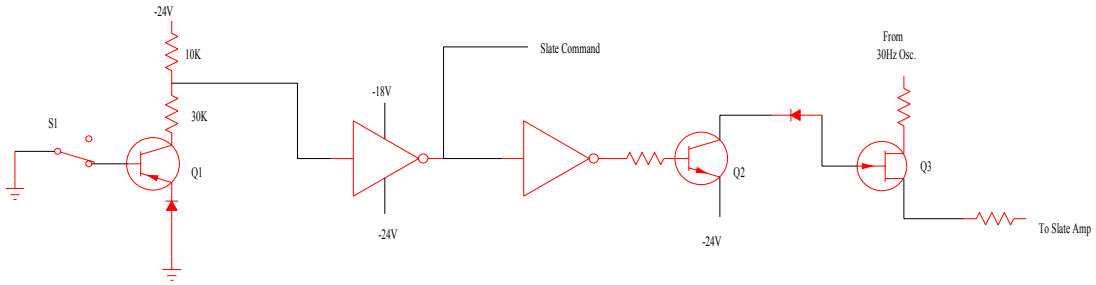
36)



37)



38) With S1 in position shown, what is the On/Off status of Q1, Q2 and Q3?



39) Explain what happens when Solo is pressed.