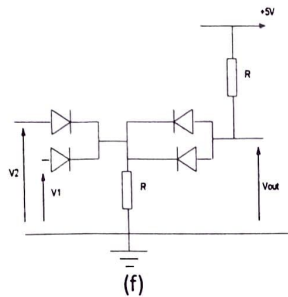
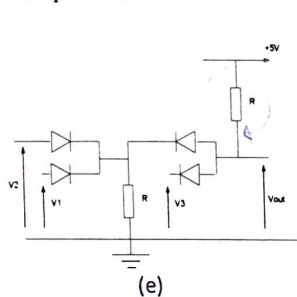


Question1:

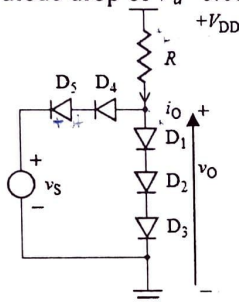
Consider the electronic circuits below and complete for each of them the opposite table; Assume a diode drop of $V_d=0V$.



V1	V2	Vout
0V	0V	
0V	5V	
5V	0V	
5V	5V	

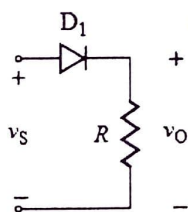
Question2:

The circuits below has $V_{DD}=10V$ and $R=30\text{ K}\Omega$. Determine the output voltage V_o and the current i_o if (a) $V_s = 5V$ and (b) $V_s=12V$. Assume a diode drop of $V_d=0.65V$.

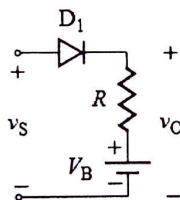


Question3:

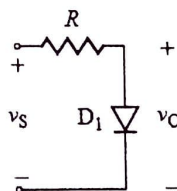
Plot the output waveform V_o of each of the following circuits a sinusoidal input voltage; consider that the diode are ideal.



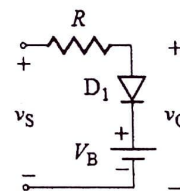
(a)



(b)



(c)



(d)

Question4:

Determine V_{CE} , I_C and β for the following circuit if $V_{cc}=12V$, $V_{BE}=0.7V$ and $I_p=20I_B$

