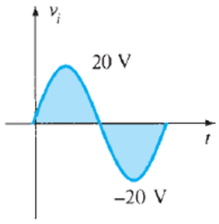
JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY
Electronics and Communication Engineering
Electrical Science-II (15B11EC211)
Tutorial Sheet: 11

Q.1[CO3] Determine V_0 for each network as shown in figure 1 and 2 for the input signal. Consider diode is a silicon diode.



Input signal

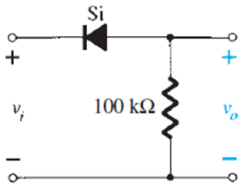


Fig. 1

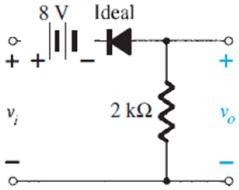
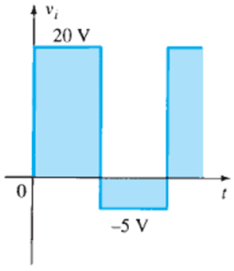
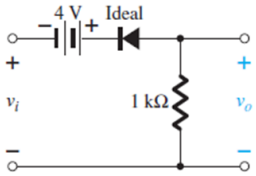


Fig. 2

Q.2 [CO3]Determine V_0 for each network as shown in figure 3 and 4 for the input signal. Consider diode is a silicon diode.

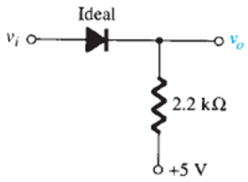


Input signal



(a)

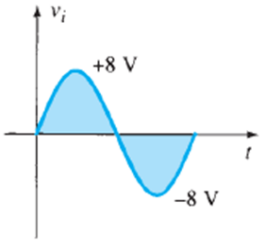
Fig. 3



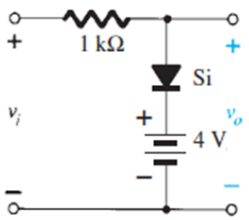
(b)

Fig. 4

Q.3[CO3] Determine V_0 for each network as shown in figure 5 and 6 for the input signal. Consider diode is a silicon diode.

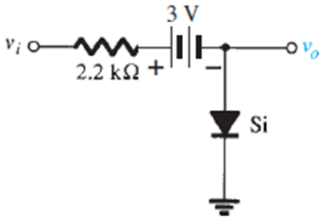


Input signal



(a)

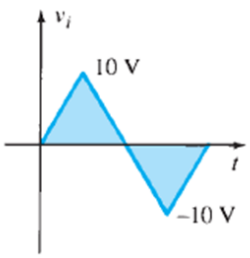
Fig. 5



(b)

Fig. 6

Q.4[CO3] Sketch I_R and V_o for the network is shown in figure 7 for the input signal. Consider diode is a silicon diode.



Input signal

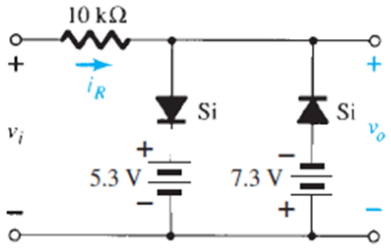
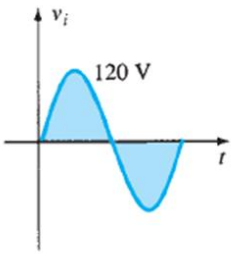


Fig. 7

Q.5 [CO3] Sketch V_o for the network is shown in figure 8 and 9 for the input signal.



Input signal

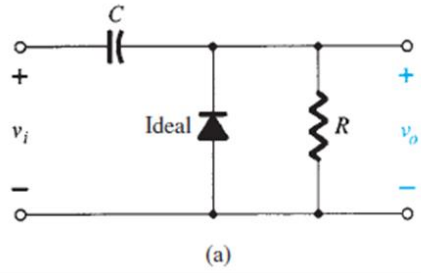


Fig. 8

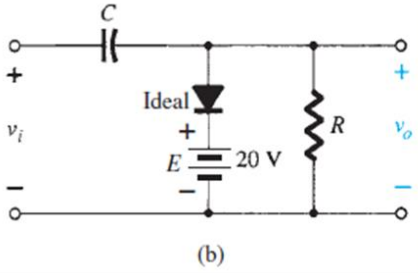


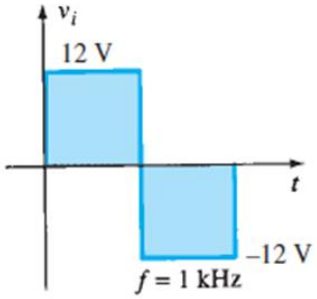
Fig. 9

Q.6[CO3] For the network of figure 10.

a. Calculate 5 time constant (5τ) .

b. Compare 5τ to half the period of the applied signal.

c. Sketch V_0 .



Input signal

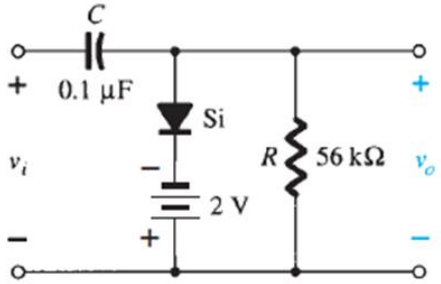


Fig. 10