



Cairo Branch

# COLLEGE OF ENGINEERING & TECHNOLOGY

Department: Electronics and Communications Engineering

Lecturer: Dr. Mostafa Fedawy.

TAs: Eng. Amr El-Wakeel, Eng. Sherry Heshmat.

Course Title: Electronic Devices I

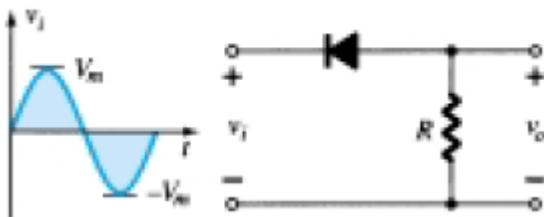
Course Code: EC 233

## Sheet 6

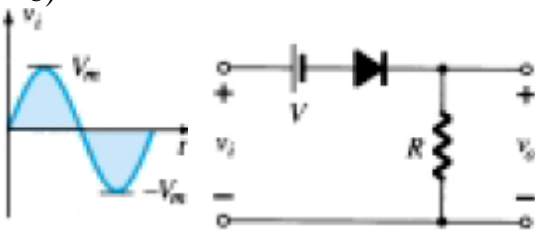
### Question one: (Series Clippers)

Determine the output voltage for the shown networks

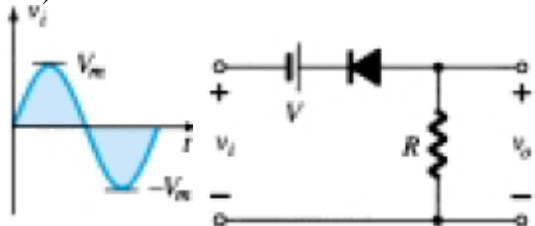
a)



b)



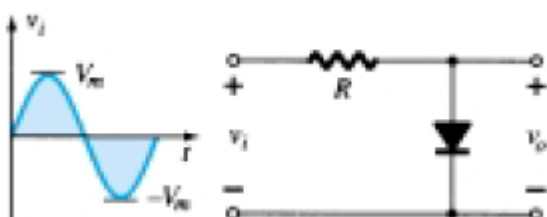
c)



### Question two: (Parallel Clippers)

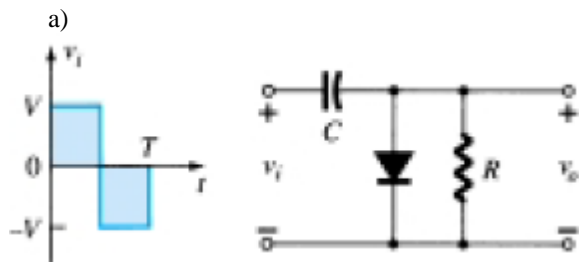
Determine the output voltage for the shown networks

a)



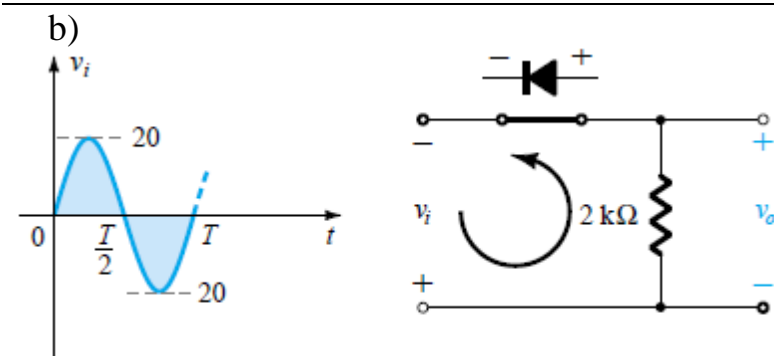
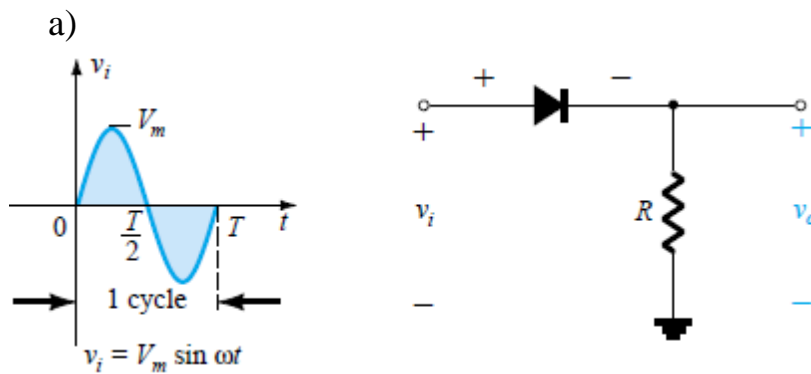
### Question Three: Clampers

Determine the output voltage for the shown networks



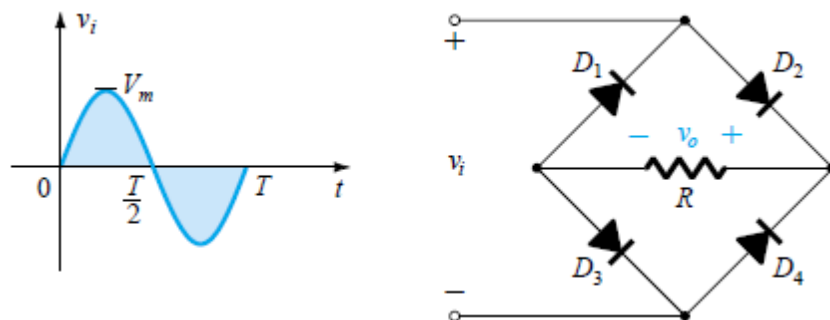
### Question four: Half wave rectifier

Determine the output voltage for the shown networks

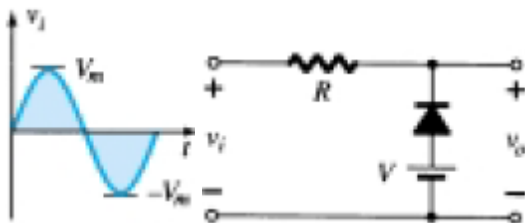
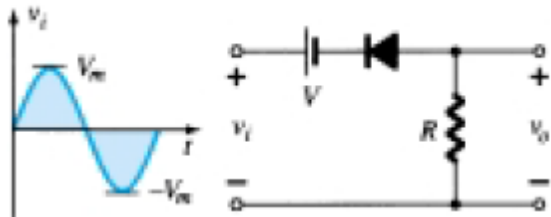
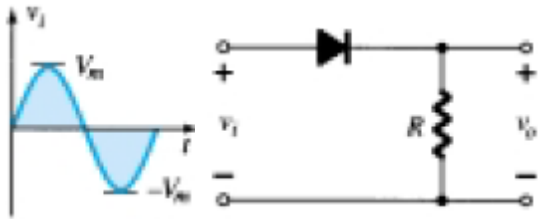


### Question five : Full wave rectifier

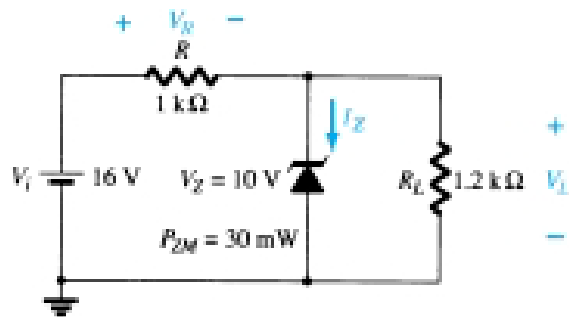
Determine the output voltage for the shown networks



**Assignment problems: Determine the  $V_o$  of each circuit and sketch it.**



For the Zener diode network shown in the circuit determine  $V_L$ ,  $V_R$ ,  $I_Z$ , and  $P_Z$



**Good Luck ☺**