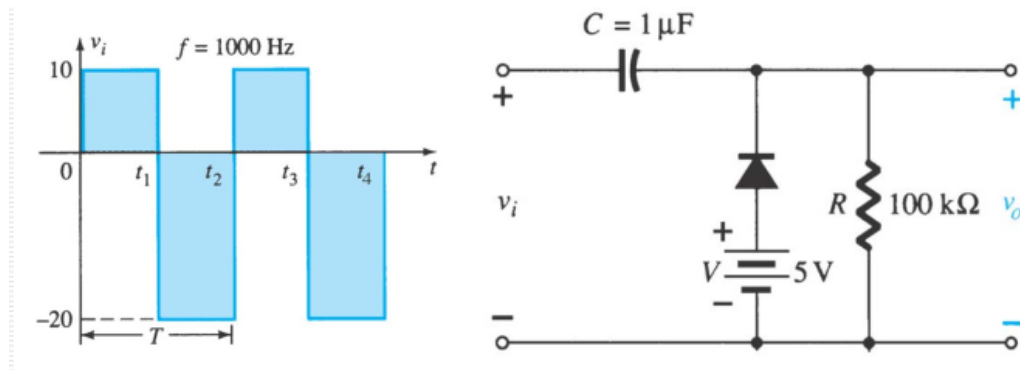


## Digital Electronics and Logic Design (EC 207)

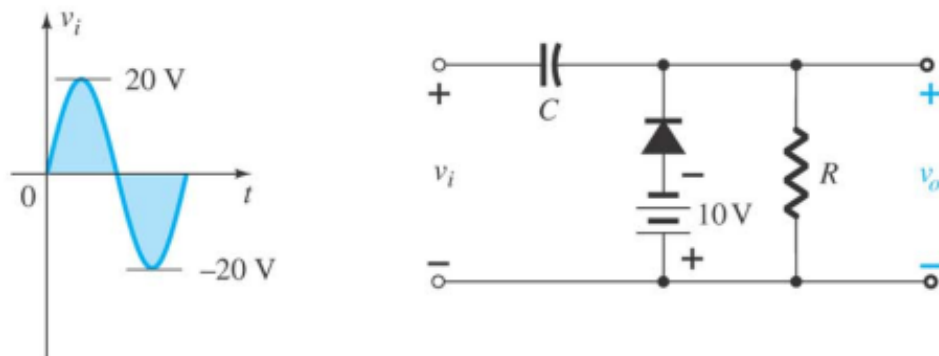
2021-22

### Practice Sheet: 2

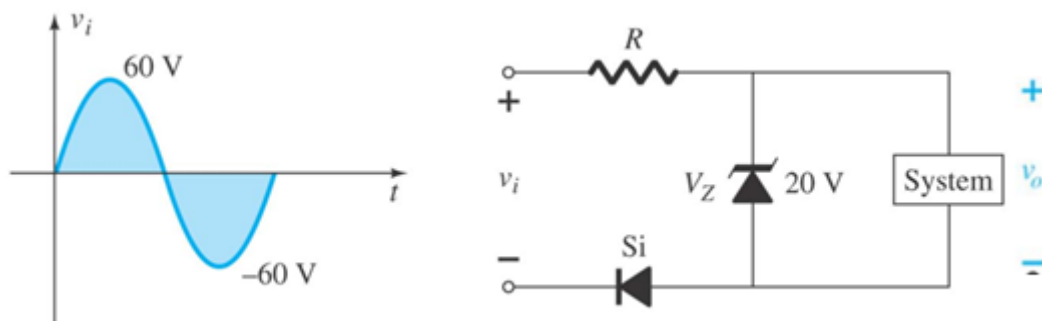
Q1: Determine the  $V_o$  of the following network for given input.



Q2: Determine the  $V_o$  of the following network for given input.

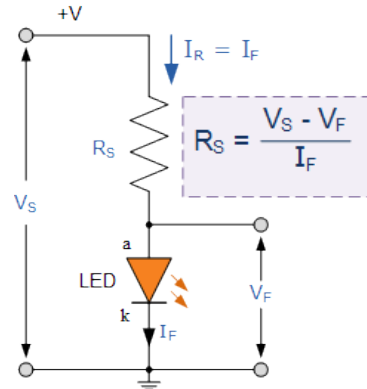


Q3: Draw the output voltage waveform for the circuit given below.



Q4: A green colour LED emits light with the wavelength of 5490 Angstrom. Find the energy gap of the material used to fabricate the LED.

Q5: Find the required series resistor to limit the current through LED to 20 mA with a forward drop of 1.6V when connected to 10 V supply.



Q6: Determine the  $V_o$  and the series/diode current  $I_d$ . Assume the forward drop across LED and Si diode is 1.8V and 0.7 V, respectively.

