

## ENEE2360 Project Summer 2022-2223

Due date 4-9-2023

For the circuit shown in Fig.(1)

- a) Using PSPICE, find the current through each resistor and all nodal voltages.
- b) Design a revised version of the circuit so that  $V_{E1} = -5.5\text{V}$ .  
(i.e. change values of  $R_1$  and  $R_2$ )
- c) Verify the designed circuit in step.(b). by simulation
- d) Write a technical typed report (no more than 20 pages) that includes all report elements ( theory, calculations , simulation circuits , results , and conclusions)

Note : in Pspice  $Q_1$  and  $Q_2$  are Q2N2222 ( $\beta=256$ ) ,  $D_1$  is a zener with part number D1N750

