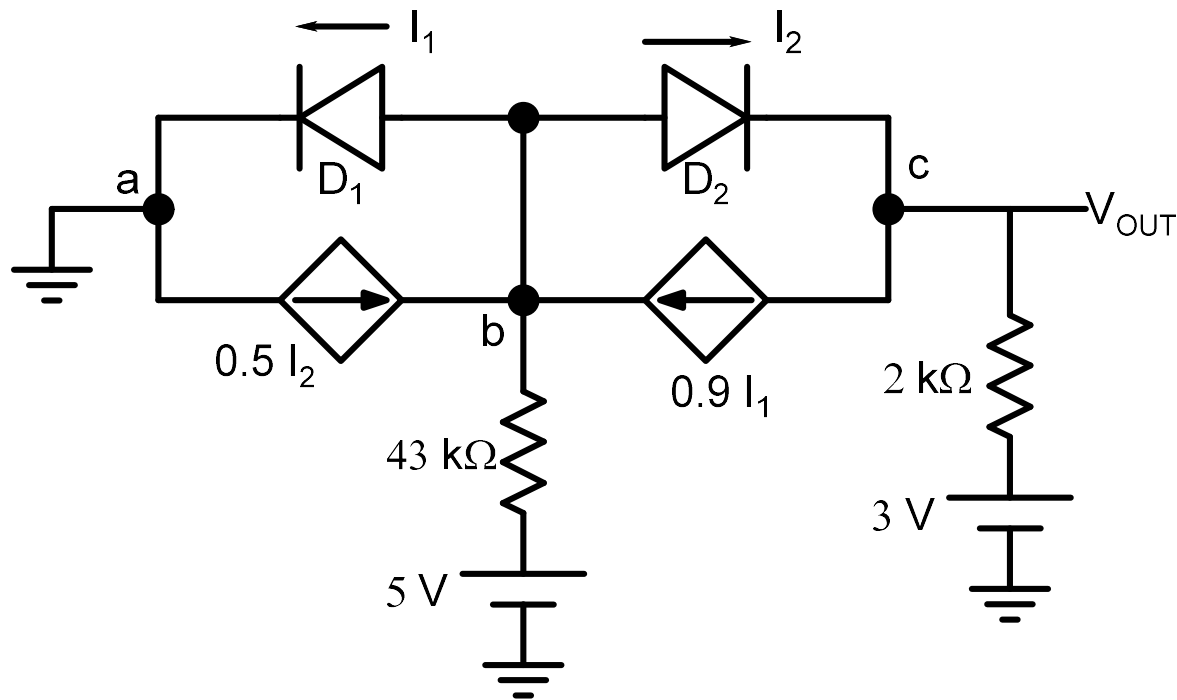


## ESC201T : Introduction to Electronics

END-Sem Exam -partA (19/12/2020) (Note there are 3-pages)

Time : 9AM-9.45AM. Stop at 9.30am and submit within time

QA-1 Determine the output voltage  $V_{OUT}$  in the circuit shown below. Assume that a diode in forward bias has a voltage drop of 0.7V and conducts zero current in reverse bias. Show all relevant steps and justify your assumptions. ----7Marks



QA-2 In the circuit shown below, **vs** represents a sinusoidal ripple. Determine the sinusoidal ripple at the output assuming that Zener diode under breakdown mode has a constant voltage drop of 5V. Show all relevant steps and justify your assumptions. ----3Marks

