EE 210   **MINI-QUIZ #5A**   **10.3.21**
Total Marks: 10   **Total Time: 10 mins.**

V_i, V_o have both DC (V_I, V_0) and ac (v_i, v_o) components.

a) Choose R_S and V_I such that V_o does not have any DC offset, and the DC power dissipation of the circuit is 600 µW.

b) Evaluate $A_v (= v_o/v_i)$ and R_0.

Data: $V_{TN0} = 0.7$ V, $k'_N = 40$ µA/V^2, $(W/L) = 10$, $\gamma = 0.4$ V$^{1/2}$, $\phi_F = 0.35$ V, and neglect CLM effect.