

I – Btech – II – Semester

Subject: Electronic Devices and Circuits

Assignment - II

1. Explain about the construction and working of enhancement MOSFET.
2. Draw and explain voltage divider bias and derive its stability factor  $S$ ,  $S'$ ,  $S''$ .
3. Draw the h-parameter model for a CE amplifier and derive expression for  $A_i$ ,  $Z_i$ ,  $A_v$ ,  $A_{v_s}$ ,  $A_{i_s}$  &  $Z_o$ .
4. Find various gains, input and output impedance of CE amplifier with  $R_L$  3 k $\Omega$  and  $R_S$  1 k $\Omega$ .
5. Find the voltage gain of common drain amplifier.
6. What is thermal resistance? Derive the condition for thermal stability.