

Ch. 6 Devices – MOS Heterojunction Video Questions (Part 1-3)

1. MOS Basics

Draw a cross section of an nMOSFET.

2. MOSFET Parameters

Write down the equation for the drain current in the linear regime and define all the variables. Also write down the equations for both mobility and gate oxide capacitance and define all variables.

3. MOS Band Diagrams

Draw the band diagrams of an nMOS in the Flatband Condition and Equilibrium Condition.