

## **Ch. 6 Devices – MOS Heterojunction – Quantum Effect Questions (Part 1)**

### 1. Poly-depletion

When poly depletion occurs, does that increase or decrease the effective oxide thickness and increase or decrease the total (stack) capacitance?

### 2. Quantization

What mode (accumulation, inversion or depletion) must the semiconductor be biased in to observe quantization and what shape of quantum is produced? Does the formation of a quantum well increase or decrease the effective oxide thickness and increase or decrease the total (stack) capacitance?