

HOMEWORK ASSIGNMENT #6

1. In order for a transistor to operate correctly as an amplifier:
 - a. the base-emitter junction is forward-biased
 - b. the base-emitter junction is reverse-biased
 - c. the base-collector junction should be equal to 0V
 - d. the base-emitter and base-collector bias must be the same
2. For a transistor operation in general:
 - a. a large base current controls a small collector current
 - b. emitter current controls collector current
 - c. collector current controls base current
 - d. a small base current controls a large collector current
3. A cutoff transistor has:
 - a. $V_{ce} = 0$
 - b. $V_{ce} = V_{cc}$
 - c. V_{ce} cannot be determined at cut-off
 - d. None of the above
4. A saturated bipolar transistor can be recognized by
 - a. a very small voltage between the collector and emitter
 - b. V_{cc} voltage between the collector and emitter
 - c. Base current = 0
 - d. Base reversed-biased
5. In a Common Emitter amplifier, the capacitor from emitter to ground is called a:
 - a. coupling capacitor
 - b. decoupling capacitor
 - c. bypass capacitor
 - d. tuning capacitor

6. If the capacitor from emitter to ground in a Common Emitter amplifier is removed, the voltage gain:
 - a. increases
 - b. decreases
 - c. is not affected
 - d. becomes erratic

7. In a normally operating Common Emitter amplifier, if the collector resistor is increased in value, the voltage gain
 - a. increases
 - b. decreases
 - c. is not affected
 - d. becomes erratic