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EE430 - Quiz #4 - Single sideband

Name _____

1. Is it practical to use plate modulation to generate single sideband? Why or why not?

1 good.

4 no.

2. You are designing a SSB transmitter using the phase-shift method. Draw a block diagram of the transmitter. It must be able to transmit either sideband, with a switch.

3 good modulator

2 significant errors.

3. You are designing a SSB transmitter using the phase-shift method. The undesired sideband must be suppressed by at least 60 dB. Assume that everything is perfect except that the gain of the audio amplifiers is not exactly as desired. How much error in the relative gain of the "I" and "Q" amplifiers can be tolerated and still meet the 60 dB sideband suppression spec?

2 correct

1 wrong question (correct for ref.)

2 wrong.

JK -0
SD DB -1
SH PM -3