

Name: _____

SSN (last 4 digits): ____ _ _ _

CIS 748 QUIZ (20080929)

1. The capacity of a channel with 9kHz bandwidth and 16 voltage levels is closer to:
 - a. *72kbps
 - b. 36kbps
 - c. 11kbps
 - d. 27kbps
2. The error free capacity of a channel with 16kHz bandwidth and SNR of 30dB is closer to:
 - a. 48kbps
 - b. *160kbps
 - c. 319kbps
 - d. 16kbps
3. A SNR of 4096 allows us to achieve how many voltage levels?
 - a. 12
 - b. 32
 - c. *64
 - d. 128
4. We transmitted 4096W of power, and received 2048W of power. Attenuation in decibels is around:
 - a. -4 dB
 - b. -1 dB
 - c. -2 dB
 - d. *-3 dB
5. We are transmitting data at 1000 bps. The error rate is 5% (about 5% of the bits are being randomly flipped due to white thermal noise). The maximum error free capacity of this channel is around:
 - a. *713bps
 - b. 801bps
 - c. 913bps
 - d. 950bps