

KFUPM - COMPUTER ENGINEERING DEPARTMENT

COE-341 – Data and Computer Communication

Quiz 03 - April 5th, 2009

Model A

Student Name:

Student Number:

1) (20 points) Digital transmission is becoming the prevailing technology as opposed to analog transmission. In class we have discussed five different reasons for this trend. State three reasons.

2) (20 points) On the subject of attenuation: (a) Explain what is attenuation and how does cause signal distortion? (b) Is it a major concern for digital signals? Why?

3) (20 points) On the subject of noise. Consider a system whose bandwidth is equal to 5 MHz, while the effective temperature is equal to 10,000 degrees Kelvin. Compute the noise power measured in dBW and dBmW for the system. Assume that Boltzman's constant is equal to -228.6 dBW/Kelvin.