

MID-SEM EXAM JUNE 2021

MCAC 204: DATA COMMUNICATION AND COMPUTER NETWORKS

Time: 1 Hour

Total Marks: 15

Attempt all questions.

1. Define analog to analog conversion? When do we need such a conversion? Describe various ways to accomplish analog to analog conversion. [4]
2. What do you understand by modulation? Explain briefly analog-to-digital modulation techniques. [4]
3. Suppose that a signal travels through a transmission medium and its power is reduced to one-tenth ($1/10$). Compute the attenuation (loss of power) in decibels. [2]
4. An analog signal has a bit rate of 16000bps and a baud rate of 1000 baud/s. How many signal elements do we need? How many data elements are carried by each signal element? [2]
5. Distinguish between a link and a channel in multiplexing. [1]
6. Compare and contrast a circuit switched network and a packet-switched network. [2]