

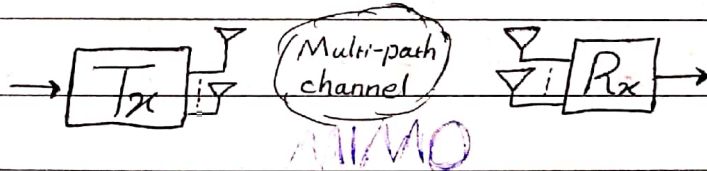
Wireless Communication System : Review for a quiz

Jan 11, 2021

11:33 p.m. = 23:33

① Final Exam of 26th of July 2018

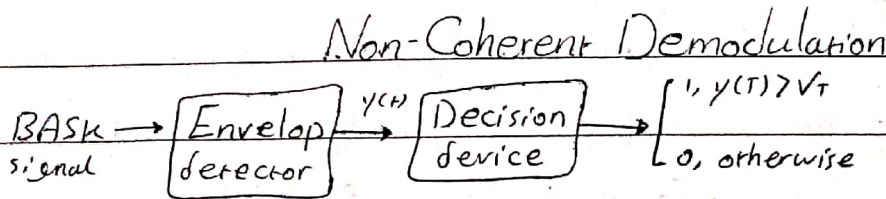
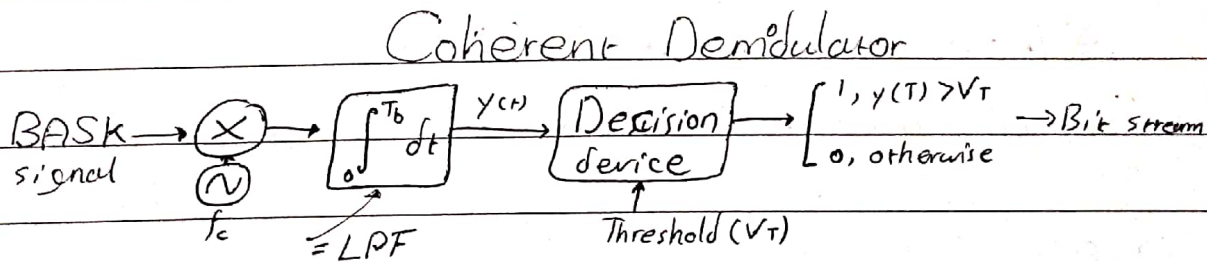
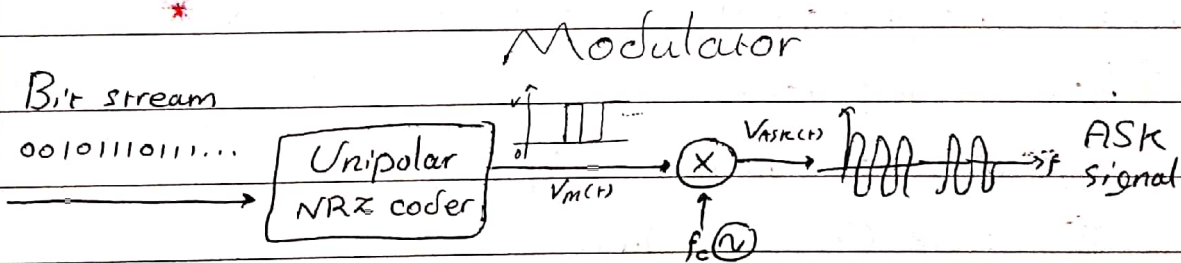
• Explain MIMO.



It's about using multiple antennas at the transmitter (Tx) and multiple antennas at the receiver (Rx).

Used to enhance the QoS, and provide wide coverage area. Also, has a high DG (Diversity Gain).

• Draw the BASK modulator, and coherent de...

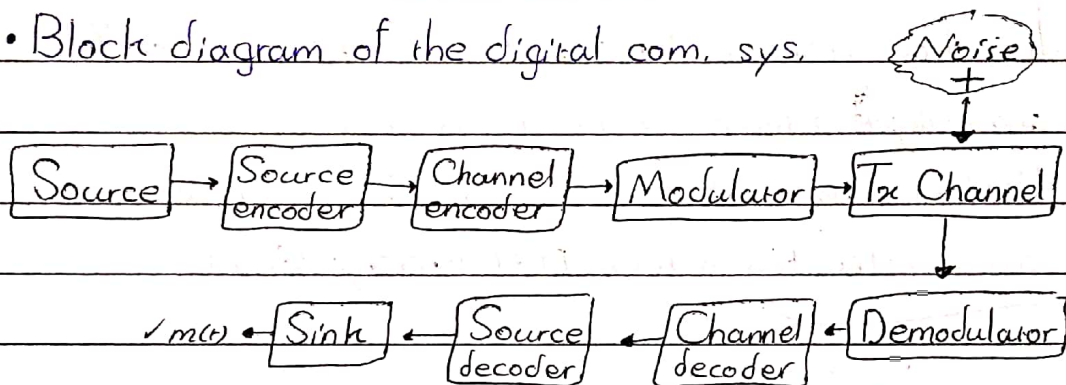


• Which modulation scheme isn't recommended to use in wireless communication? Why?

ASK. It's noisy, due to the main information's located on the envelop (Amplitude).

② Final exam of 8th of Feb 2018

• Block diagram of the digital com. sys.



• What're the challenges of wireless com. sys. ? *

There's a need for:

① ~~High~~ Higher data rate (Capacity)

② Larger Coverage Area

③ Increased the reliability (QoS)

However, without increasing the Power or BW, as much as possible

• Define diversity, and what's its goal?

It's a method of improving the reliability of a message signal by using two or more comm. channels with different char.

Its goals: reduces the effects of multipath fading, and improves the reliability of transmission without increasing the transmitted power or sacrificing the BW.

• What^{re} the performance evaluation criteria of wireless sys. ?

• Two criteria of interest:

① Probability of error

② Outage Probability

• BER reference of wireless sys. ?

$10^{-5} - 10^{-6}$