Physical and Data Link PT 1

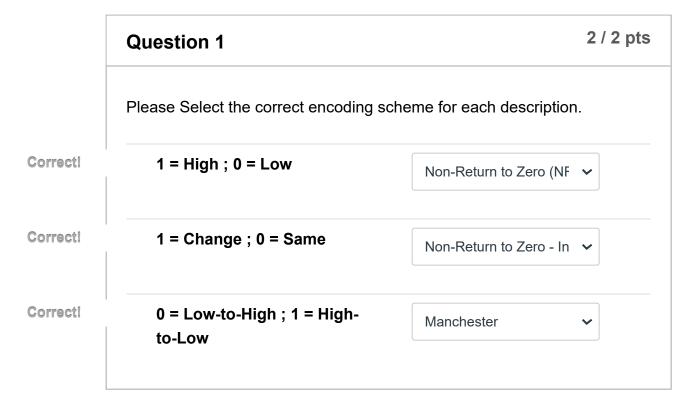**Due** Feb 23 at 11:59pm   **Points** 10   **Questions** 8   **Time Limit** None

Instructions

This quiz will cover topics learned from the Physical Layer and the Data Link Layer.

Attempt History

	Attempt	**Time**	**Score**
LATEST	[Attempt 1](#)	3 minutes	10 out of 10

Score for this quiz: **10** out of 10

Submitted Feb 12 at 5:28pm

This attempt took 3 minutes.

Question 1   2 / 2 pts

Please Select the correct encoding scheme for each description.

Correct!   **1 = High ; 0 = Low**   [Non-Return to Zero (NF ⌄]

Correct!   **1 = Change ; 0 = Same**   [Non-Return to Zero - In ⌄]

Correct!   **0 = Low-to-High ; 1 = High-**   [Manchester ⌄]
                 to-Low

Question 2   2 / 2 pts

[Select all that apply] What are the some issues with NRZ?

Correct!

☑ Long streams of 1's can cause desynchronization

☐ Long streams of 1's help the clock to stay in time.

Correct!

☑

Long streams of 0's hard to differentiate between low signal or no signal

☐

1's and 0's back to back multiple times send a reset signal to the receiver

Question 3   1 / 1 pts

NRZ-I Solves NRZ's drawback of too many 0's, but does provide a
solution when there are too many 1's.

○ True

Correct!

◉ False

Question 4   1 / 1 pts

In order to solve NRZ-I's fundamental problem, we use a bit-mapping that
maps every 4 bit sequence to a 5 bit sequence.

◉ True

Correct!

○ False

Question 5   1 / 1 pts

What is the Data-Link Layer responsible for?

○ Sending electrical signals over a physical medium connecting two devices

Correct!   ◉ Sending Blocks of data (frames) between physical devices

○ Creating IP addresses so that devices may talk to one another

○ Recording Session information from an already established connection

Question 6   1 / 1 pts

Select what *should* happen if a "DLE" occurs in the transmission stream of bytes?

Correct!   ◉ It should be escaped with a DLE

○ Nothing, the receiver will not read the DLE

○ The sender will need to configure the transmission not to send any DLE patterns as they are protected patterns.

○ A DLE cannot occur in the data, the sender will not let that happen

Question 7   1 / 1 pts

One dimensional Parity Bits can detect up to a 3 bit error in transmission.

○ True

Correct!   ◉ False

Question 8   1 / 1 pts

Checksums are still used today because they are resilient to errors and easy to implement.

○ True

Correct!   ◉ False

Quiz Score: **10** out of 10