6. a) What is framing, why is it important, and how is it achieved in synchronous and asynchronous systems?

   b) What is data transparency and how is it achieved in synchronous and asynchronous systems? What costs are involved?

   c) What is scrambling - why is it used and how is it done?

   d) What is balanced electrical transmission and why is it used?

7. a) What are NAKs and what purpose do they serve?

   b) What is piggybacking and why is it used? What costs are involved in using it?

   c) What is the difference between rollcall and hub polling - when are they used?

   d) What are the differences between strict TDM and statistical TDM - what are their costs?

8. a) What is ARQ and what type of error control does it use?

   b) What are the differences between Go-Back-N and Selective Repeat ARQ?

   c) What contributes to the loss of utilization at the data link layer? What forms do these terms generally take and why?

BONUS: Give a question suitable to the material and supply an answer for it.

SIGN HERE: I have not discussed the contents of this test with anyone who was taking it, nor anyone who took it before I did, nor will I discuss it with anyone who has not taken it until they have turned it in. I have received no help on this test from others. SIGNED & DATED: _____