1.) DTE is Data Terminating Equipment(DTE), or a computer/terminal. DCE is Data

Communicating Equipment(DCE), or a modem.

2.) Functional, Electrical, Procedural, Mechanical

3.) USB has the advantage of having higher speeds than EIA-232F and USB can be used

with a wider array of devices

6.) When setting up a network that has wifi extenders, each connected to the previous

extender, in a daisy-chain form.

7.) SCSI differs from iSCSI because it only utilizes the direct connections between devices,

as opposed to iSCSI which sends information and commands over TCP/IP packets.

9.) Asynchronous, synchronous and isochronous connections all differ in that they send data

differently. Asynchronous sends data 1 character or bit at a time, while synchronous sends sets of bytes at a time. Still different is Isochronous which sends data as needed by the receiving computer.

12.) Asynchronous communications has the advantage of being extremely simple for

hardware or software to initiate. Disadvantage is that usually the ratio of data bits to check bits is usually 7:3 meaning that right of the back only 70% of the total space used is actual data, in other words it's very inefficient.

14.) The synchronous communication has the advantage of being far more efficient at

sending data because the string of bits that make up the data byte can be as long as necessary, at the same time the check bits all stay the same size. The disadvantage comes as the communication takes up more space.

15.) A half-duplex connection only allows one direction of data movement to happen at a time.

A full-duplex connection allows for data movement to occur in both directions at the same time. Do note, either connection can be in both directions.

16.) The difference lies in the way that the terminals in a network are connected. If each

terminal is directly connected to the mainframe, it is a point-to-point connection. If the

terminals all connect to one line and the single line goes directly to the mainframe, then it

is a multipoint connection.

17.) The mainframe polls each terminal, in other words asks each terminal if it has data.

2.) The biggest advantage of Thunderbolt is the high-speed at which it is capable of

transmitting data, currently 10-Gbps eventually 100-Gbps.

3.) Yes, the device will work because a device with USB 3.0 interface is backwards

compatible with the older versions of USB. As long as the connector fits into the port, a connection can be established.