

Chapter 1 Topics:

- What is Data & Data Communications
- Types of Network Connection Layouts
- OSI & TCP/IP Model
- Network Devices (hubs, switches, routers ect...)
- What is Convergence
- Benefits of a Micro-to-local area network

Chapter 2 Topics:

- What is Data, Signal, & Noise
- Digital Encoding Schemes
- Types of key shifting
- Amps, Watts, Hz, & Volts
- What is a Codec
- Data to Signal Conversion Types

Chapter 3 Topics:

- Types of Conducted Media (fiber, twisted pair ect)
- Wireless Media
- Difference Between Shielded and Unshielded

Chapter 4 Topics:

- What is an Interface Standard, and four components of the interface
- Difference between Synchronous and Asynchronous
- Types of connections (ie. Point to Point)
- What is interfacing
- Advantages and Disadvantages of an asynchronous connection

Chapter 5 Topics:

- What is Compression, different types of
- What is Multiplexing, types
- T1 & SONET
- Different between a Multiplexor and a Demultiplexor?

Chapter 6 Topics:

- Noise and the different types
- Sliding Window, ACK, NAK
- Parity Checks
- What is Hamming
- Error-Prevention Techniques

Chapter 7 Topics:

- Advantages and Disadvantages of a LAN
- What is Link Aggregations
- Difference between a Hub and a Switch
- Network Topologies
- How do the different Topologies work

This is not an exhaustive 100% list but if you know this you should be do fine.