Chapter 1 - Objectives

➢ Understand categories of computers
  o Personal Computers (PC)
  o Servers
  o Mainframes
  o Supercomputers
➢ Understand the User Interface
  o Graphical
  o Command-line
➢ Understand the history of computers and the PC
  o Development of software
  o Development of hardware
➢ Understand the purpose and function of each category of software
  o Applications
  o Systems
➢ Understand Difference between hardware and software
➢ Understand the relationship of data to information

Chapter 1-Reading

Skip pages 22 (E-book Readers) through 24, 28 through 39

Chapter 4-Objectives

➢ Understand data representation
  o ASCII
  o EBCDIC
➢ Understand bits and bytes
➢ Understand numeric values
➢ Understand different numbering systems
  o Decimal
  o Hexadecimal
  o Binary
➢ Be able to do simple conversions from one numbering system to another
➢ Be able to do simple binary arithmetic
➢ Understand kilobytes, megabytes, gigabytes
➢ Understand different types of memory
  o RAM
  o ROM
  o Cache
Virtual

- Know the different components of the processor
  - Processing chip
  - Memory
  - The system bus

Chapter 4-Reading

All

Chapter 8-Objectives

- Understand the components and functions of the operating system
  - The kernel
  - Utilities
  - Device driver
- Understand files and file manipulation
- Understand the definition of the user-interface
- Understand the difference between GUI (Graphical User-Interface) and Command-line Interface
- Know the different operating systems
  - Windows
  - Unix
  - Mac OS
  - Linux
  - Windows Server
- Understand the history of operating systems

Chapter 8-Reading

Skip pages 419 through 420, 423 through 429

Chapter 9-Objectives

- Understand the advantages of networking
- Understand networking hardware
  - NIC
  - Router
  - Hub
  - Switch
- Understand physical transmission media
  - Coax cable
  - Twisted pair
  - Fiber optics
- Understand network servers
- Understand packets, packet-switching
- Understand network protocols
  - TCP/IP
  - Ethernet
➢ Understand the different types of networks
  o LAN
  o WAN
➢ Understand network architecture
  o Peer-to-peer
  o Client/Server
➢ Understand network topology
  o Bus
  o Ring and token ring
  o Star
➢ Understand analog vs digital communications
➢ Understand bandwidth and broadband

Chapter 9-Reading

Skip 462 through 469, 494 through 497