## **CHAPTER 2**

# Network Models

#### **Review Questions**

- 1. Physical, data link, network, transport, and application.
- 3. Application layer.
- 5. Peer-to-peer processes are processes on two or more devices communicating at a given layer
- 7. Headers and trailers are control data added at the beginning and the end of each data unit at each layer of the sender and removed at the corresponding layers of the receiver. They provide source and destination addresses, synchronization points, information for error detection, etc.
- 9. The data link layer is responsible for
  - a. framing data bits
  - b. providing the physical addresses of the sender/receiver
  - c. data rate control
  - d. detection and correction of damaged and lost frames
- 11. The transport layer oversees the process-to-process delivery of the entire message. It is responsible for
  - a. dividing the message into manageable segments
  - b. reassembling it at the destination,
  - c. flow and error control
- 13. The application layer services include, file transfer, remote access, shared database management, and mail services

### **Multiple-Choice Questions**

- 15. b
- 17. a
- 19. b
- 21. c

- 23. b
- 25. d
- **27**. b

## **Exercises**

- 29.
  - a. network layer
  - b. transport, data link layers
  - c. application layer, physical layer
  - d. application layer and physical layer
  - e. network layer
- 31.
- a. application layer
- b. data link, transport layers
- c. physical layer
- d. data link layer
- e. transport layer