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1. List the advantages of networked computing relative to standalone computing
2. Distinguish between client/server and peer-to-peer networks
3. Distinguish between different network topologies
4. Describe several specific uses for a network
5. Describe how Ethernet works

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6. Identify a variety of uses for WANs
7. Explain different WAN topologies, including their advantages and disadvantages
8. Compare the characteristics of WAN technologies, including their switching type, throughput, media, security, and reliability
9. Describe several WAN transmission and connection methods, including PSTN, ISDN, T-carriers, DSL, broadband cable, ATM, and SONET

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10. Explain virtualization and identify characteristics of virtual network components
11. Create and configure virtual servers, adapters, and switches as part of a network
12. Describe techniques for incorporating virtual components in VLANs
13. Explain methods for remotely connecting to a network, including dial-up networking, virtual desktops, and thin clients
14. Discuss VPNs and the protocols they rely on
15. Identify the features and benefits of cloud computing and NaaS

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16. Wireless
17. Wireless links, characteristics
    –CDMA
18. IEEE 802.11 wireless LANs (“wi-fi”)

19. Cellular Internet Access
  – architecture
  – standards

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20. Mobility
21. Principles: addressing and routing to mobile users
22. Mobile IP
23. Handling mobility in cellular networks
24. Mobility and higher-layer protocols

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25. What is Network Management
  – Platform, applications, and system
  – Architecture

26. OSI Network Management Model
  – Performance
  – Availability