

Possible Question: Data Communication and Networking (Chapter 6, 7)

Chapter 6:

Short Notes/ Questions:

1. Information sharing (Page 198)
2. Resource sharing (Page 198)
3. LAN metering software (Page 198)
4. Dedicated server LAN (Page 199)
5. Server farm (Page 199)
6. File server, Print server (Page 200)
7. Peer-to-peer networks (Page 200)
8. Network interface card (NIC) (Page 201)
9. Types of cables used in LAN. (Page 201)
10. 2 (two) purposes network hubs and switches serves (Page 203)
11. Wireless Access Point (Page 203)
12. Network operating system (NOS) (Page 206)
13. ADS and its important functions: (Page 206)
14. Network profile (Page 207)
15. What is topology? (Page 208)
16. Logical topology, Physical topology (Page 208)
17. Types of Ethernet. (Page 212)
18. Probe frame, beacon frame (Page 214)
19. Types of wireless Ethernet (Page 216)
20. Improving LAN performance (Class lecture)

Broad Questions:

1. Describe 2 (two) types of network circuits. (Page 201,202)
2. What is network operating systems? Describe 2 (two) types of NOS with network profile. (Page 206, 207)

3. What is topology? Describe hub based Ethernet and switch-based Ethernet including the types of switches used in switch based Ethernet. (Page 208-211)
4. What is media access control? Describe 3 (three) types of media access control. (Page 213-215)
5. Describe all the WLAN security with examples. (Page 216-217)

Chapter 7:

Short Notes/ Questions:

1. Backbone network and backbone network components (239-242)
2. MDF, CDF (Page 246)
3. Patch cables (Page 247)
4. Virtual VLAN (Page 252)
5. VLAN ID (Page 255)
6. 3 (three) ways to improve backbone performance (Page 260)
7. How VLAN's work (Page 255)
8. **Math (Page 249, class lecture)**

Broad Questions:

1. What is backbone network? Name the backbone network components and describe them. (Page 239-243)
2. Describe backbone network architecture with 4 (four) types of backbone network. (Page 243-255)
3. Describe the ways to improve backbone performance (Page 260)

Chapter 8:

Short Notes/ Questions:

1. What is common carrier?
2. What is LEC? Define LEC.
3. What is IXC? Define IXC.
4. What is SPID? SPID used in which wide area network?

5. What is BRI? Define BRI.
6. What is PRI? Define PRI.
7. What is CSU, DSU?
8. What is PAD?
9. What is datagram method?
10. What is Virtual circuit?
11. What is PVC, and SVC?
12. 3 (three) steps of improving WAN performance.

Broad Questions:

1. What is circuit switched network? Explain the architecture of the circuit switched network and explain what you know about 2 (two) types of circuit switched network.
2. What is dedicated- circuit network? Explain the architecture of dedicated-circuit network and also explain what you know about 4 (four) types of dedicated-circuit network.
3. What is T-carrier service? Describe T-carrier architecture and explain 2 (two) types of T-carrier circuit.
4. What is packet switched network? Describe the basic architecture. What 2 (two) methods used in packet switched network? Also describe 4 (four) types of packet switched network.
5. What is Virtual Private Network? Describe the basic architecture of VPN. How VPN actually works? Also describe 3 (three) types of VPN that exists.
6. Describe the ways you can improve a Wide Area Network (WAN) performance.

Chapter 10:

Short Notes/ Questions:

1. What is an asset? (Page 347)
2. What is mission critical application (Page 347)
3. What is a threat (Page 347)
4. What are the 3 (three) primary goals of security (Page 342)
5. What are the 3 (three) network controls (Page 343, 344)

6. What are macro virus, and worm? (Page 352)
7. What is denial of service attack? (Page 352)
8. What is DDoS, DDoS agent, DDoS handler? (Page 352)
9. Write all the types of intruders. (Page 361)
10. What is IP spoofing (Page 365)
11. Define security holes and patch. (Page 369)
12. What is social engineering (Page 385)
13. What is computer forensics? What is honeypot (Page 389)

Broad Questions:

1. Describe 3 (three) types of risk assessment of an organization. (Page 345-351)
2. Describe the ways to attain business continuity of an organization. (Page 351-361)
3. Describe the 7 (seven) steps of intrusion prevention. (Page 361- 390)

Chapter 10:

Short Notes/ Questions:

1. What is network management? (Page 449)
2. Write down 3 (three) ways of organizing network management function. (Page 450,451,452)
3. Write down 2 (two) types of configuration management (Page 454,455,456)
4. Write down 2 (two) ways of improving performance. (Page 465)
5. Write down 2 (two) ways of end-user support. (Page 466)
6. Write down 2 (two) types of cost management (Page 468-471)

Broad Questions:

1. Describe performance and fault management (Page 456-465)
2. Total cost of ownership (TCO) math's. Based on both number of users and number of computer used (Page 468,469)

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