

Chapter 11

1. Explain how the functions of the application layer, presentation layer, and session layer work together to provide network services to end user applications.
2. Discuss in brief about TCP/IP Application Layer Protocols.
3. Explain how end user application operate in a P2P network. List out the advantages and disadvantages of P2P network.
4. How does http differ from https? Why is HTTPS recommended over HTTP on websites such as banks or online stores?
5. List out 3 common HTTP message types.
6. Explain how web and email protocols operate.
7. Differentiate between SMTP, POP and IMAP
8. Explain in details about how the DNS work.
9. Discuss about the DHCP in details.
10. Explain how file transfer protocols operate.
11. What do you understand by File Sharing Services? Discuss about SMB in brief.

Chapter 12

1. Explain why basic security measure are necessary on network devices.
2. Describe various types of threats and vulnerabilities.
3. Discuss in details various types of network attacks.
4. Describe in details various types of malware.
5. Differentiate between DoS and DDoS attacks.
6. Explain in details about general mitigation techniques.
7. What are different types of firewalls?
8. Explain how we can configure network devices with hardening features to mitigate security threats.
9. What do you understand by device security and end point security?

Chapter 13

1. Explain how a small network serves as the basis of larger networks.
2. Explain about the device selection and IP addressing for a small network.
3. What relatively inexpensive method of providing uplink redundancy is availability to small businesses?
4. What is the best way to balance the affordability of all-in-one devices against the need for redundancy?
5. Explain about the traffic management and its need in a small network.

6. Explain how we can use the output of the ping and tracert commands to verify connectivity and establish relative network performance.
7. Why is the arp process so important to IPv4 network operations?
8. Describe the common networking troubleshooting methodologies.
9. Explain in brief basic troubleshooting issues with devices in the network.