

Review Questions on Networking and Network Security

January 8, 2015

1 Networking

Question 1

- With reference to the OSI seven-layer model, what are the two key functions in the presentation layer?
- With reference to the OSI seven-layer model, what are the key function in the session layer?
- With reference to the TCP/IP model, where should the hypertext transfer protocol (HTTP) situated?
- In TCP/IP model, there is one protocol layer called transport. With reference to the OSI seven-layer model, which layer(s) is(are) responsible for the same functions as this transport layer?
- What is major purpose of PORT number?
- With reference to the OSI seven-layer model, where is the Internet Protocol situated?
- While OSI seven-layer model has been treated as an open system model for the network protocols, why industry seldom adopts this open standard? Instead, almost all the network products are designed in accordance with TCP/IP standard.
- Describe how secure socket layer (SSL) can enable security protection in point-to-point communication.
- Describe the differences between TCP and UDP.
- Describe five possible causes for not able to browse a homepage.

- Name three media which are common for wireless communication.

2 Network Security

- What kind of attack can hang up a server?
- Which security technology can be cracked in a few minutes?
- Which security technology is highly recommended for Wi-Fi security protection?
- What encryption standard the WPA2 is used?
- When did WPA2 certification start?
- What kinds of software are used for malicious software protection?
- What are the common computer viruses?
- Which software is for screening out unsolicited email?
- Describe the mechanism how public key and private key are used for secure message communication.
- Describe how digital signature is used for authenticating the identity of a sender.
- What is the major difference between an e-Certificate and a public key?