

STUDENT ACTIVITY 3.1_B: UNDERSTAND PROTOCOLS AND SERVICES

MTA Course: 98-366 Networking Fundamentals

Topic: Understanding protocols and services – Understand the TCP model

File name: NetFund_SA_3.1_B

Lesson Objective

3.1_B: Understand the OSI model.

Resources, software, and additional files needed for this lesson

- None

Directions to the student

Answer the following questions by selecting the correct answer.

1. A packet whose destination is outside the local TCP/IP network segment is sent to
 - a. fileserver
 - b. default gateway
 - c. DNS server
 - d. DHCP server
2. Why was the OSI model developed?
 - a. Manufacturers disliked the TCP/IP protocol suite.
 - b. The rate of data transfer was increasing exponentially.
 - c. Standards were needed to allow any two systems to communicate.
 - d. None of these

3. Which piece of information is not vital for a computer in a TCP/IP network?
 - a. IP address
 - b. default gateway
 - c. subnet mask
 - d. DNS server
4. The physical layer is concerned with the physical medium movement of what?
 - a. programs
 - b. dialogs
 - c. protocols
 - d. bits
5. Which one of the following functionalities is provided by IP?
 - a. dialogs
 - b. bits
 - c. programs
 - d. addressing
6. Which of the following can be an Ethernet physical address?
 - a. 01:02:01:2C:4B
 - b. 07:01:02:01:2C:4B:2C
 - c. 07:01:02:01:2C:4B
7. An IP address contains how many bits?
 - a. 8
 - b. 16
 - c. 32
 - d. 64
8. Which IP address is reserved for software loopback?
 - a. 224.x.x.x
 - b. 127.x.x.x
 - c. 0.0.0.0
 - d. 255.255.255.255

9. Which port is reserved for use of the SMTP protocol?
- a. 21
 - b. 23
 - c. 25
 - d. 27
10. Which one of the following is a connectionless protocol?
- a. UDP
 - b. TCP
 - c. OSI
 - d. ISO