

ITEC-90 FINAL EXAM

Name:

Section:

1. It is the _____ that will convert the data into binary digits such as 1 and 0 and then prepare them for the physical layer. (1pt)
2. Data Link Layer has 2 sub-layers which are the: (2pts)
3. Enumerate the functionalities of Data Link Layer (6pts)
4. Enumerate the functionalities of Network Layer (4pts)
5. All data sent over the Internet is broken down into smaller chunks called _____. (1pt)
6. When a packet reaches the router's input link, the router will move the packets to the router's output link. This process is called _____. (1pt)
7. The DHCP process of assigning an IP address to a new device on a network consists of 4 steps which are executed by the following messages: (4pts)
8. It's a way to map multiple local private addresses to a public one before transferring the information. (1pt)
9. Solve the following problem below. (20pts)
 - a. Find the following below based on the IP Address **10.1.1.55/28**
 - Network ID
 - Broadcast IP
 - First Host IP
 - Last Host IP
 - Next Network
 - # of IP Addresses
 - CIDR/Subnet
 - b. Find the following below based on the IP Address **10.1.1.37/29**
 - Network ID
 - Broadcast IP
 - First Host IP
 - Last Host IP
 - Next Network
 - # of IP Addresses

➤ CIDR/Subnet

10. List down below the steps in DNS Lookup. (10pts)

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