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**CIS-225 09/08/18**

**CIS225: Unit 2 Review Assignment**

**Instructions:**

Please complete the following review assignments in the following chapters in your textbook, **Tomsho, G. Guide to Network Essentials 6th ed.**

* Answer the following questions from Chapter 5: 6, 7, 11-16, 18, and 20
* Answer question 8 from Chapter 6

**Chapter 5:**

1. **Which of the following protocols resolves logical addresses to physical addresses?**
   * **E** ARP (Address resolution Protocol)
2. **Which of the following protocols provides connectionless service? (Choose all that apply)**
   * **B** UDP (Unit Datagram Protocol)
3. **When using TCP/IP, which of the following must computers on the same logical network have in common (Choose all that apply)**
   * **A** Network ID
   * **C** Subnet mask
4. **Which of the following IPv6 features is an enhancement to IPv4? (Choose all that apply)**
   * **A** Larger address spaces
   * **C** Built in Security
5. **Which protocol can configure a computer’s IP address and subnet mask automatically?**
   * **E** DHCP (Dynamic Host Configuration Protocol)
6. **How many bits must be reallocated from host ID to network ID to create 16 subnets?** 
   * **4 Bits** allocating 4 bits from host ID to Network ID will create 2^4 or 16 subnets
7. **For the Class C network address 192.168.10.0, which of the following subnet masks provides 32 subnets?**
   * **B** 2^5 = 32 subnets. 128+64+32+16+8 = 248 on last octet.
8. **How many host bits are necessary to assign addresses to 62 hosts?**
   * **A** (2^6 = 64) / 64 – 2 = (62) so 6 bits are required
9. **When a Windows computer is configured to use DHCP but no DHCP server is available, what type of address is configured automatically?**
   * **B** APIPA address or (Automatic Private IP Address)
10. **Which of the following is a reason to subnet? (Choose all that apply)**
    * **A** Networks can be divided into logical groups
    * **C** Subnetting can decrease the size of broadcast domains

**Chapter 6:**

1. **Which OSI Layer determines the route a packet takes from sender to receiver?**
   * **C** Network layer determines the destination IP a packet takes from sender to receiver.