Department of information technology

Network Management

Sheet 2

1. Express 145.32.59.24 in binary format and identify the address class:

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2. Given the address 23.56.7.91 and the default class A mask, find network address (Subnet).

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3. We have the following network 192.168.10.0 and we need to divide using the subnet mask 255.255.255.224(/27). Find the following.

a. number of subnets.

b. Number of host per subnet

c. Subnets address

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4. Assume that you have been assigned the 200.35.1.0/24 network block. Define an extended-network-prefix that allows the creation of 20 hosts on each subnet.

a. What is the maximum number of hosts that can be assigned to each subnet?

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b. What is the maximum number of subnets that can be defined?

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c. List range of host addresses that can be assigned to Subnet (200.35.1.192/27)

d. What is the direct broadcast address for subnet 200.35.1.192/27?

5. You currently use the default mask for your IP network 192.168.1.0. You need to subnet your network so that you have 30 additional networks, and 4 hosts per network. Is this possible, and what subnet mask should you use?