Date: / / Page no:

Q3 ⇒ B)

Ans 3 ⇒ B)

Purpose of subnet mask ⇒

The subnet mask provides a means to organize the IP address space into an ordered hierarchy; it splits the IP address into a network portion and a host portion.

On a host it is a clue to indicate whether an address is for local delivery or if it is destined to a routing node to carry it somewhere else on the networks.

On a network, it is a guide of where to send a packet when a packet is about to be forwarded, the address itself has no mask, just the address. A routing table has a list of networks with masks representing the network arrangement. A table lookup finds the matching network portion of the packet to determine the next-hop router that should get the message, or the network interface for local delivery.

Date: / / Page no:

⇒ first classes in IP Address define the availability of Networks and Hosts in each class like class A have subnet Mask of 255.0.0.0 or /8 that means that valid class A's subnet Mask is 255.0.0.0 subnet Mask represents the network by defining the leading Bits as 1's while the Hosts with trailing Bits as 0's.

The subnet Mask - 255.255.0.255 in query here is wrong as SM consists of continual Network Bits and Hosts Bits. Now second part - let it be 255.255.255.0 can be used for representing class A then it is incorrect as post subnetting any class Network will be defined by its subnet Mask and will become classless.