Part I

Answers 1:

In traditional UDP you will not receive any ACK message for message delivery. So, You have to design your protocol to expect a confirmation back from the destination when a message is received.

Answers 2:

- 1. there is a dedicated server and specific clients in the client-server network model whereas, in peer-to-peer each node can act as both server and client.
- 2. In the client-server model, the server provides services to the client. However, in peer-to-peer, each peer can provide service sand can also request for the services.
- In peer-to-peer model, the servers are distributed in a system, so there are fewer chances of server getting bottlenecked, but in the client-server model, there is a single server serving the clients, so there are more chances of server getting bottlenecked.
- 4. The client-server model is more expensive to implement than peer-to-peer.
- 5. The client-server model is more scalable and stable than peer-to-peer

Answers 3:

Ping is a basic Internet program that allows a user to verify that a particular IP address exists and can accept requests.

To find out the dot address (such as 205.245.172.72) for a given domain name, Windows users can go to their command prompt screen (start/run/cmd) and enter ping xxxxx.yyy (where xxxxx is the second-level domain name like "whatis" and yyy is the top-level domain name like "com").

Part II

- 1. 16 bit
- 2. None
- 3. SMTP
- 4. nslookup
- 5. Less overload
- 6. None of the above
- 7. 65536
- 8. 32 * 8 bits
- 9. connect()
- Socket(),sendto(),recvfrom(),close()