## NANYANG POLYTECHNIC

## **Tutorial 11 - Transport & Application Layer**

- 1. You are developing an application that uses both Transmission Control Protocol (TCP) and User Datagram Protocol (UDP), two different types of transport layer protocols.
  - (a) Describe the characteristics for TCP and UDP each respectively that will make them a possible choice for your application.
  - (b) Using a fully labelled diagram, describe how the TCP 3-way handshake is performed before a connection is established. Indicate clearly the states.
- 2. What is the function of each of the OSI layers in TCP/IP Application Layer?
- 3. What is a peer-to-peer application? What are some examples of peer-to-peer applications?
- 4. List and Describe the 3 Application Layer protocols used in the email system?
- 5. What is DHCP and how does it work?