

## ITS 413 – QUIZ 2

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

ID: \_\_\_\_\_

Total Marks: \_\_\_\_\_

out of 10

### Question 1 [7 marks]

- a) Every company with their own IP address (or range of addresses) has an Autonomous System (AS) number. True      False
- b) Border Gateway Protocol is used for routing inside an Autonomous System. True      False
- c) CAT and TOT (two ISPs in Thailand) are considered Tier-1 ISPs. True      False
- d) A peering agreement between ISPs means the two ISPs have agreed to exchange their traffic freely. True      False
- e) IEEE 802.11 uses the same MAC protocol as IEEE 802.3. True      False
- f) IP must be implemented in all hosts, routers and switches connected to the Internet. True      False
- g) IP implements a retransmission scheme to ensure reliability. True      False

### Question 2 [3 marks]

A network has three wireless LAN basic service sets, with two clients in each set. The extended service set is connected via a single Ethernet switch. This switch also connects to a fixed router A. Router A connects via a PDH link to another router B. Router B connects to a host via Ethernet.

- a) Draw the complete network, labelling all nodes (devices) in the network and showing connections between nodes. [2 marks]
- b) If IP is used in this network, how many IP subnets exist. Show them on your diagram. [1 mark]