

Networking questions – Topic 3

SL

1) Complete the following table

Network hardware	Definition
Switch	
Node	
Router	
WiFi	
WAP	

2) Suggest a situation where you might find the following networks.

- a) LAN
- b) VLAN
- c) WAN
- d) VPN
- e) PAN
- f) P2P

3) Which of these are not advantages of networks?

- a) Sharing of printers
- b) Faster loading of software
- c) Flexibility of where people can work
- d) Sharing of data and resources.

4) TCP/IP (Transmission control protocol/Internet protocol) is the name given to the network protocol used on the internet and many other networks.

- a) Explain the meaning of the word protocol.
- b) When data is sent in packets over a network there are many layers of both software and hardware that the packets pass through. Describe this process.

5) Describe the following methods of security and what protection is offered by them:

- a) Encryption
- b) userID and password
- c) trusted MAC address
- d) physical security

6) Explain how protocols help with the following:

data integrity, flow control, deadlock, congestion, error checking

7) Speed of data transmission can vary

- a) Give one example of a situation where this may occur
- b) Use your answer to part a) to explain why data compression can be useful

Find an area in the network syllabus section to create a 5 minute mini presentation for the rest of the group.