***Networking Fundamentals***

**Tutorial 8**

1) Give 3 reasons why packet switching is preferred to circuit switching

2) Name 4 packet switched technologies

3) Why does X.25 technology feature extensive error checking?

4) What is the maximum speed quoted for X.25?

5) Which packet switching technology is an advancement of the X.25 technology?

6) What are the data packets called within frame relay technology?

7) What is the maximum speed quoted for frame relay?

8) What protocol is used by frame relay to achieve the routing?

9) What is ATM?

10) What is different about the cells in the ATM technology as compared with the data structures in X.25 and frame relay technologies?

11) What speeds are quoted for ATM technology?

12) What is ADSL?

13) What is SDSL?

14) What is meant by the xDSL being a distance sensitive technology?

15) What is meant by ADSL being asymmetrical?

16) State the speed and the distances involved with ADSL and SDSL

17) What job does the low pass filter perform in an ADSL installation?

18) State the typical download/upload speeds for a cable modem

19) State 3 reasons for the need of a VPN

20) What is the name given to the data path in a VPN?

21) State one protocol that is used with VPNs

22) How does wireless technology achieve a blanket coverage of a wireless signal?

23) What is MPLS?

24) What is HDLC?