ITS323 − Quiz 5

Name:＿＿＿＿＿＿＿＿＿＿＿＿＿ ID: ＿＿＿＿＿＿＿＿ Marks: ＿＿＿ (10)

Question 1   [1.5 each marks]

Fill in the blanks regarding the following statements. Select from the following: circuit switching | datagram packet switching | Dijkstra's algorithm | frequency division multiplexing | hop limit | selective flooding | sequence number | time division multiplexing | virtual circuit packet switching

(a) A disadvantage of ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ is that all stations must use the same link technology/speed.

(b) Using a ＿＿＿＿＿＿＿＿＿＿＿＿＿＿ reduces the number of packets transmitted in a network, but also reduces the chance of delivery of data to the destination when flooding.

(c) With the same path characteristics and data size, ＿＿＿＿＿＿＿＿＿＿＿＿＿＿ will always incur a larger total delay to transfer data when compared to datagram packet switching.

Question 2   [1.5 marks]

Explain an disadvantage of using information from neighbour nodes (rather than local information only) when determining least-cost routes in a network.

Question 3   [4 marks]

The following is a subset of the least-cost paths in a network, where the numbers represent nodes and the costs of links are identical in both directions. If each node has its own routing table, draw the routing table for node 8.

3—4—8, 1—8—7—5—9, 6—2—8—4