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) _____ involves establishing a connection from source to destination and then sending the data as packets.

    (b) _____ involves data from multiple users being transmitted over a single link at the same time, but at different frequencies.

    (c) _____ is the most common form of switching used in landline (fixed) telephone networks.

Question 2   [1.5 marks]

Explain an advantage 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 7.

     6—2—3—7, 1—7—5—4, 3—8—7