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 telephone call usually requires 4kHz bandwidth. A local telephone exchange (end-office) may use a single link to carry data all telephone calls in-progress to an intermediate exchange. The transmission of multiple calls across the link is an example of _____.

(b) An advantage of _____ is that resources are reserved for the duration of the connection, meaning the application performance is guaranteed.

(c) _____ can be used to calculate the least-cost routes in a switched network.

(d) _____ is well suited to applications that have varying sending rates over time.

Question 2 [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.

8—7—1, 8—5—4—2, 6—3—8