

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) When using _____ data at the source is sub-divided into packets, and packets may take different paths to the destination.
- (b) _____ involves data from multiple users being transmitted over a single link at the same frequency, but at different times.
- (c) _____ was originally developed for telephone networks.
- (d) A node has five neighbour nodes. Sending a copy of a packet to three of the five neighbours is a method to reduce packet transmissions—this method is called _____.

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 1.

1—7—6—3, 4—2—1, 1—5—8