Problem 22 (8 points):
Consider the following network:

![Network Diagram]

1. Use the link state algorithm to compute the distance table for node A. Show all work (similar to table 4.2 in the book). (2 points)

2. Consider now the distance vector algorithm.
   (a) Compute distance tables for all nodes. Show all work (similar to figure 4.7 in the book). (2 points)
   (b) Show how the distance tables get updated if the cost of the link from A to D changes from 1 to 6. (2 points)
   (c) Show the same as in (b), but now with the poisoned reverse technique. (2 points)

Problem 23 (2 points):
Find an RFC in which the TOS bits in the IP header are specified and list the different services they represent. What is the default TOS for ICMP error messages?