# Electrical, Computer, and Systems Engineering ECSE-4670: CCN <br> Fall 1999 

## Problem Set 3- Due Monday, October 15th 1999

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Notes:

1. Be brief and precise, but complete in your answers
2. A part of the homework credit is given to reading. Reading assignments will be quizzed in both informal and formal quizzes
3. Please write your answers on separate sheets and staple it along with the questions to facilitate easy grading.
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| 1 | 2 | 3 | Total |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 20 | 15 | 15 | 50 |

TA Signature : $\qquad$

## 1. Reading assignment:

Read the textbook (Tanenbaum) Section 5.1 ans 5.2. Summarize key concepts and issues NOT covered in class. Also navigate and critique the online module: http://links.math.rpi.edu/devmodules/graph_networking
For each new concept/issue (in the text or the online module) a one-line descriptive summary is what is required, nothing more or less. For the online module, also include comments about how effective it was to help you understand the concepts and any suggestions for improvement

2. Apply Dijsktra's algorithm to find the shortest paths from node a to every other node, and hence find the shortest path to node b. Show your work.
3. Apply Bellman-Ford algorithm to find the final stable set of distance vectors in the above configuration. Show your work. You can use a table to, each row of which holds the distance vectors at a given time, and each column holds the distance vector at a given node.

