CS 447: Networks and Data Communications
Homework #03

Assigned Date : Tuesday, April 14, 2015
Due Date   : Tuesday, April 21, 2015 @ 09:29:59 a.m.

Instructions

- This is an individual assignment. **Do your own work**. Acts of academic misconduct (plagiarism, use of illicit solutions manuals, etc.) are subjected to university code of conduct.
- Produce your answers using an appropriate word processing application.
- Submit your solutions through Moodle. A dropbox will be available with 24 hours in advance of the deadline. Late policy is enforced per syllabus late policy. Your digital submission must be in PDF format. Grades and specific feedback will be communicated through Moodle.

  – You may, **in addition** to the digital submission, handover a printed, stapled copy of your answers to the instructor at the beginning of class, **if** you prefer to have explicit written feedback of your answers. This, however, is not required neither considered the primary submission option.

- **DO NOT** email your solutions to the instructor or the grader.
- Make proper arrangements, after consulting the instructor, to deliver your solutions **BEFORE** the due date, if you have a planned absence on the due date.
- Answer all questions
- Your solutions are due on **Tuesday, April 21, 2015 @ 09:29:59 a.m.**
- Total points: **[UG: 224, MS: 274 points]**

Questions

Q1. [**10 points**] Compare and contrast link-state and distance-vector routing algorithms.
Q2. [**10 points**] Why are different inter-AS and intra-AS protocols used in the Internet?
Q3. [**16 points**] P12 on page 420 of the textbook
Q4. [**30 points**] P13 on page 420 of the textbook
Q5. [**28 points**] P26 on page 422 of the textbook
Q6. [**20 points**] P28 on page 423 of the textbook

Q7. [**20 points**] P37 on page 425 of the textbook
Q8. [**50 points**] Complete the Wireshark Lab 01 found at `http://www.cs.siue.edu/~tgamage/S15/CS447/A/WS02.pdf` and answer the questions listed there.

MS Requirement/Extra Credit

Q9. [**50 points**] WS02 extra credit question.
Q10. [**20 points**] P10 on page 419 of the textbook
Q11. [**20 points**] P19 on page 421 of the textbook