

# Computer Networks – Fall 2018

## Assignment # 1

**Due Date:** 28/09/2018

**Time:** 5 pm

**We shall be calling each one of you for evaluation of this assignment and you will have to justify your solutions before the course instructors and the TA. Failure to justify your answers will result in negative marks. Severity of the plagiarism can result in F as well.**

Use Computer Networking - A Top-Down Approach 6<sup>th</sup> Edition for this assignment

1. Solve the following problems from the back of **Chapter 1** and provide the hand written solution. Some questions might need you to submit screen shots. In such cases, only the soft copy of the screen shots and relevant description is required

P3,P4,P8, P14,P18, P25

2. Solve the following problems from the back of **Chapter 2** and provide the hand written solution where possible. Some questions might need you to submit screen shots. In such cases, only the soft copy of the screen shots and relevant description is required

P5,P6, P9, P10, P15, P18

3. Read about working of P2P systems and find out solutions to the following questions.
  - 1) How can one peer deliver content to all other peers?
  - 2) Why will peers help each other?
  - 3) How will peers find content?
  - 4) How peers learn from where to get content?
  - 5) How BitTorrent works, enlist steps with brief explanation?

Type the answers of these questions and submit the printout

4. Find out what are the third generation P2P systems and specifically find out what is Pastry and Tapestry in terms on peer to peer systems and write one paragraph to explain your findings.

Type the paragraph and submit the printout.