Computer Networks
SPRING 2024
Assignment#3 (6A)

Due Date: 19th March, 2024
Submission Mode & Time: Handwritten solutions to be submitted during the

lecture.

Please note the following:

1. No exceptions to the above date and time will be allowed. Inability to submit the assignment by the required time will result in zero marks.

2. To ensure self-completion of assignments and discourage plagiarism, the instructor or the relevant TA may randomly contact you and ask for an explanation of your answers. Where plagiarism and/or cheating is evident, you will be referred to the departmental disciplinary committee. In extreme cases of plagiarism an F may be awarded immediately with further referral to university disciplinary committee.

3. All solutions must be **hand-written.**

4. **Assignment Solution Submission**: In case of **in person / physical lectures at the campus**, hard copy of the hand-written assignment's solutions will be submitted by **hand** by each student to the Instructor / TA directly during the lecture on the due date.

PART-1

Use the following text for completion of this part of the assignment:
Computer Networking - A Top-Down Approach 8th Edition by Kurose & Ross.

Solve the following problems from the back of **Chapter 3**. Every Question has equal marksi.e.

Review Questions: (3*5 = 15 marks)   [CLO 3]

   R3, R4, R7, R15, R18

Problems: (4*5 = 20 marks)   [CLO 3]

   P3, P27, P31, P40

PART - 2

Question1 (10Marks) **[CLO 3]**

On a TCP connection, current congestion window size is 4 KB. The window advertised by the receiver is 6 KB. The last byte sent by the sender is 10240 and the last byte acknowledged by the receiver is 8192.

a) What is the current window size at the sender?
b) What is the amount of free space in the sender window?