**CENG 3331 Intro to Telecommunication and networks**

# Homework 7
## Due at the beginning of class, 11/21/2022

1. (20) What are the four generic architectural components of a public communications network? Define each term.

2. (20) What are the advantages of packet switching compared to circuit switching?

3. (20) Compare with datagram and virtual circuit packet switching networks, what are the differences and what are the advantages and disadvantages?

4. (20) Do the last example on Lecture 18 again. What is the dominated delay in this connection? Can you improve the delay (reduce)? Why, why not?

5. (20) Redo the example. This time link transmission speed now is 1 Gbit/s. How long will it take Alice to receive the message up to the last bit? What is the dominated delay this time? Can you improve the delay (reduce)? Why, why not?

6. (Extra 10) Join the discussion of **Vehicle ad-hoc Network** on Blackboard. Attach only the screenshot of your answer from Blackboard.