

Multimedia (Fall 2017, Sejong University)  
Prof. S. M. Riazul Islam

Practice Assignment (PA) 9 and 10

1. Suppose, the instantaneous bit rates of a multimedia communication link at ten different time instants are recorded as follows:

Time Instant (Sec)	100	200	300	400	500	600	700	800	900	1000
Bit Rate (Kbps)	40	80	70	60	90	100	60	70	70	50

Calculate the Burstiness Ratio of the link.

2. The transmitted and the received bit sequence in a multimedia communication are recorded as follows:

Transmit bit sequence	1 1 0 0 0 0 1 0 1 1 0 1 1 1 0 1 0 0 0 1 1 1 1 1 0 1
Received bit sequence	1 1 0 0 0 0 1 0 1 1 0 1 1 1 0 1 0 1 0 1 1 1 1 1 0 1

Calculate the bit error rate (BER) of the link.

3. What are the different factors that affect the quality of service (QoS) of a multimedia network? Explain how each factor affects the said QoS.
4. Differentiate between the Data Rate and Throughput of a multimedia network?

Instructions:

1. You should upload this PA in Sejong University Blackboard after you log-in with your ID
2. **Upload either PDF or Microsoft word document.**
3. Only a single file should be uploaded
4. Student name and student number should be clearly written on the top of the uploaded document.
5. Deadline: December 07, 2017 (Thursday).