# Data Communication and Computer Networks Assignment No.01

Due Date Till 23-06-2022

**Note:** The assignment must be handover to the instructor in the class only. Late assignments will not be graded.

## **QNO 1:**

If the length of the packet is 1GB and the bandwidth is 10000 bps, find the transmission time.

## **QNO 2:**

If the message size is 1KB, distance between sender and receiver is 5km, velocity is 3\*10^8 and bandwidth is given as 1000bps, find the total time taken for the delivery of the packet?

#### **QNO 3:**

If the message size is 1024 bits, bandwidth is 1000 Mbps, and round-trip time (RTT) is 1s. Calculate the link utilization of the sender?

#### **QNO 4:**

Is HFC transmission rate dedicated or shared among users? Are collisions possible in a downstream HFC Channel? Why or why not?