Roll No._____

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
T-III EXAMINATION- December, 2019
B. Tech VII Semester & M.Tech. I Semester

COURSE CODE: 10M11CI112   MAX. MARKS: 35
COURSE NAME: Advanced Computer Networks
COURSE CREDITS: 3   MAX. TIME: 2 Hours

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. (CO5) Explain the various flags used in TCP Header with it's purpose? [5]

Q2. (CO5) Differentiate between flow control and congestion control in detail? [5]

Q3. (CO6) What are the main objectives of congestion control in datagram network? Also describe the optimal point mathematically? [5]

Q4. (CO6) Describe the Additive increase and multiplicative decrease (AIMD) algorithm ? [5]

Q5. (CO7) How many ways a TCP sender can recognize the packet loss? How it behave in AIMD algorithm when there is time out or it gets duplicate ACK? [6]

Q6. (CO7) Drive the formula for sending rate of TCP sender based on packet drop probability and round trip time? [6]

Q7. (CO8) Justify the statement "A low RTT connection have more throughput compare to high RTT connection" ? [3]