

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- Oct 2017

B.Tech/M.Tech VII/II Semester

COURSE CODE: 10M11CI112

MAX. MARKS:25

COURSE NAME: ADVANCED COMPUTER NETWORKS

COURSE CREDITS: 3

MAX. TIME: One Hour Thirty Minutes

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

Question 1: With the help of a diagram explain 802.11 MAC headers. [4 Marks]

Question 2: Write the importance of flow control at Datalink layer? Why is ARQ said to an effective method for Error control? Explain 'Go-Back-N' ARQ? Assume that, in a Stop-and-Wait ARQ system, the bandwidth of the line is 1 Mbps, and 1 bit takes 20 ms to make a round trip. What is the bandwidth-delay product? If the system data frames are 1000 bits in length, what is the utilization percentage of the link? [8 Marks]

Question 3: What is RARP? Explain the given figure [4 Marks]

No.	Time	Source	Destination	Protocol	Length	Info
25	2.142069	ff:ff:ff:ff:ff:ff	Broadcast	ARP	60	who has 172.16.32.253? tell 172.16.32.50
26	2.332296	ff:ff:ff:ff:ff:ff	Broadcast	ARP	60	who has 172.16.32.253? tell 172.16.32.59

Question 4: Write short notes on: [9 Marks]

1. Signal-to-Noise Ratio (SNR).
2. Expected Transmission Count ETX
3. Pulse Code Modulation
4. A complex bandpass signal has a bandwidth of 200 kHz. What is the minimum sampling rate for this signal?
5. Explain hidden station and exposed station problem
6. RJ 45 and 100 base T.