

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech., Winter 2017 – 18 Examination

Semester: 2
Subject Code: 03205130
Subject Name: Advance Computer Network

Date: 11/01/2018
Time: 02:00 pm to 04:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) Explain the difference between Packet switching and Circuit switching. (05)
- B) What is ICMP? Explain. (05)
- C) Write down the advantage of ARP and RARP. (05)
- Q.2** Answer the following questions. (Attempt any three) (15)
- A) What is TCP/IP Model? Explain the functions and protocols and services of each layer? Compare it with OSI Model.
- B) Define computer networks? Discuss various types of networks topologies in computer network. Also discuss various advantages and disadvantages of each topology
- C) IP= 203.18.73.149 & Subnet mask= 255.255.255.224, then calculate Subnet Id & Subnet Number.
- D) If bandwidth of the cable is **100mbps**, speed of the cable is **2*10⁸ m/sec**, then calculate **1bit delay** in meters of cable.
- Q.3** A) Explain the working of mail server. Also write the difference between POP3 and IMAP4. (07)
- B) Explain Go Back n ARQ Protocol. (08)
- OR**
- B) Differentiate between http and ftp. (08)
- Q.4** A) Explain TCP Header Format. (07)
- OR**
- A) What is IP addressing? How it is classified? (07)
- B) Explain Three-Way Handshake Mechanism used by TCP to terminate a Session reliably. (08)