PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Summer 2017 - 18 Examination

Semester: 2   **Date: 30/05/2018**
Subject Code: 03205130   **Time: 02:00PM TO 04:30PM**
Subject Name: Advance Computer Network   **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) Write short note on Dynamic Host configuration protocol?	**(05)**
B) Compare Virtual Circuit and Datagram network.	**(05)**
C) Compare Distance Vector & Link state Routing algorithm.	**(05)**
Q.2 **Answer the following questions**. (Attempt any three) (Each five mark)	**(15)**
A) Write short on Border Gateway Protocol.	
B) The address of a class B host is to be split into subnets with 5-bit subnet number. What is the maximum number of subnets and the maximum number of hosts in each subnet and calculate default subnet mask and mask after subnetting.	
C) Compare POP & IMAP4.	
D) Write short note on retransmission policy in transport layer protocol.	
Q.3 B) Draw TCP header format and discuss each field.	**(07)**
B) Channel has a rate of 4kbps and propagation delay of 20msec. For what frame size thus stop & wait protocol give efficiency 0.5 and calculate transmission delay & round-trip time.	**(08)**

OR

B) Explain IPv4 Classification. Draw IPV4 header format and discuss each field.	**(08)**
Q.4 A) Write essay note on SMTP.	**(07)**

OR

A) Write note on ICMP? How ICMP can provide reliability with connectionless protocol?	**(07)**
B) Explain TCP congestion control mechanism. Discuss Slow start and additive phase.	**(08)**