UNIT-3 part-2

1	Write the differences between IPV4 and IPV6	6M
2	Discuss the different classes of IP addresses and provide the range of each IP address class.	6M
3	Discuss importance of Hierarchical Routing Algorithm	6M
4	What is Flooding? Discuss advantages and disadvantages	6M
5	Explain the following congestion control techniques [i] Back Pressure [ii] Choke Packet	6M
6	Explain the following congestion control techniques [i]Implicit Signaling [ii] Explicit Signaling	6M
7	What do you mean by Traffic shaping ? How is it achieved by **Leaky Bucket** Algorithm ?	6M
8	What do you mean by Traffic shaping ? How is it achieved by the **Token Bucket** Algorithm?	6M
9	Identify the valid and invalid IP address in the following set,If invalid write the reason 1. 24.25.26.8 2. 10.3.156.256 3. 56.087.54.78 4. 255.255.255.255 5. 100.2.3.345.456 6. 4A.234.34.255	6M
10	(a) Identify **the no.of Networks, no.of Hosts per network in Class B** IP addressing format. (b) Write the Dotted Decimal Notation(DDN) format for the given Hexadecimal Notation **C22F1582**.	3M 3M

UNIT-4

1	Explain the following responsibilities of Transport Layer [1]The Process to Process Delivery [2] End-to-End Connection between Hosts [3] Multiplexing and Demultiplexing	12M
2	Discuss how **Connection establishment and Connection release** is done in the Transport layer with all possible scenarios.	12M
3	How **flow control** is achieved in the Transport layer with different Buffering Techniques.	12M

4	(a) Write the differences between TCP and UDP protocol.	6M
	(b) Explain the structure of UDP Header format	6M
5	Explain the structure of TCP Header format	12M
6	Discuss the following elements of Transport Layer Protocols with suitable diagrams 1. Addressing 2. Connection establishment 3. Connection release	12M
7	Explain the following [i] TCP Connection Establishment [ii] TCP Connection Release	12M
9	How PORT number,IP Address,MAC Address are necessary for "process to process delivery" in the Transport layer? Discuss with a suitable diagram.	12M
10	What is the difference between TCP Connection Establishment vs TCP Connection Release with valid diagrams	12M

UNIT-5

1	What is DNS ? What is the need of DNS? How does a DNS service map domain names to IP addresses.?	12M
2	What is WWW ? What are the steps performed at Client side and Server side while accessing "**http://www.cs.washington.edu/index.html".**	12M
3	Explain [i] The architecture of email system [ii] SMTP protocol	12M
4	What is the importance of HTTP protocol? Describe the different types of HTTP Connections?	12M
5	Discuss the importance of SNMP protocol	12M
6	Explain about FTP protocol	12M
7	Discuss the importance of TELNET protocol	12M
8	Explain the importance of following protocols 1. DNS 2. FTP	12 M
9	Explain the importance of following protocols 3. SMTP 4. SNMP	12M

10	Explain the importance of following protocols 5. HTTP 6. TELNET	12M