Eighth Semester
Electronics and Communication Engineering.
13.803 COMPUTER COMMUNICATION

Time:3 Hours   Max.Marks:100
PART A
(Answer all questions)

1. Name any two techniques for reliable data transmission of data?

2. What is the need of Internet Protocol?

3. Layer is an essential element of any communication model. Why?

4. What is role of virtual circuit identifier in relation to packet switching networks?.

5. Differentiate Service to service and peer to peer interface

6. What is congestion control?

7. 'Time to live for a packet ', it is having a significant role in transmission, why ?

8. Why we use internet checksum algorithm?

9. List the full form of i) MPLS and ii) BGP

10. What is VPN? What is it's advantage?   (2X10=20)

PART B

(Answer any one question from each module, 20Marks each)

MODULE-I

11. a) What is ISO-OSI Reference Model? Explain the function of each Layer of this model.

   b) What are the techniques used for reliable transmission of data. Explain stop and wait

   Protocol

                                          Or

12. a) Compare and contrast TCP and UDP protocols.

   b) Explain connection oriented transport and describe Transmission Control Protocol

                                                                                    (20X1=20)

MODULE-II

13. a)Describe with an example Dijkstra's shortest path algorithm.

   b) Describe the following:

i.) Network as a graph

ii) Virtual Circuits.

Or

14a)Explain the tree structure of Internet to describe Global Internet.

b)Compare and contrast broad casting and multicasting

c) What is Error Reply?

d) Discuss about IPV6

(20X1=20)

MODULE-III

15.   Describe framing.   Explain the following:-

i) BISYNC frame format

ii)PPP frame format &

iii) DDCMP frame format

Or

16. a) ARP packet formats can be used for mapping IP addresses into Ethernet address. Explain

how the packet format for the said mapping can be implemented.

 b) How some common errors can be protected by introducing i) two dimensional parity check

and ii) Cyclic Redundancy Check

(20X1=20)

MODULE-IV

17. a) Describe in brief the common types of attacks that affect a network

b) Describe how Simple Three way Handshake and Third Party authentication protocol ensures

authentication

Or

18. a) How network security can be protected by the application of Firewalls and Packet

filtering

b) Describe the random collection of transformations that can be applied in message digest

algorithm and explain MD5   (20X1=20)