

B.E. / B.Tech (Full Time) ARREAR EXAMINATIONS, NOV / DEC 2011

ELECTRONICS AND COMMUNICATION ENGINEERING

SIXTH SEMESTER

EC 9353 – COMMUNICATION NETWORKS

(REGULATION 2008)

Time: 3 Hours

Max.marks: 100

Answer ALL Questions

Part-A (10x2=20 Marks)

1. What are the principles followed during layering of architecture?
2. Define protocols and topologies?
3. Distinguish clearly the difference between Flow control and Error control.
4. What is Hub and Routers?
5. Compare the performance of circuit switching, packet switching and message switching?
6. What is VPN?
7. Mention the recent issues in network security.
8. What is meant by WWW, HTTP, FTP?
9. What are the difference between SDS and TDS?
10. State the specific features of No.4 ESS toll switch?

Part-B (5x16=80 Marks)

- 11.(a) With neat required block diagram explain the functions of each layer in ISO-OSI model for open system interconnection. (16)
- 12.(a) Explain in detail about various random access protocols adopted in computer networks? (16)
- OR
- 12.(b)(i) Explain in detail about 802.3. (10)
- (ii) In a stop and wait ARQ system, the bandwidth of the line is 1 Mbps and 1 bit takes 20ms 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? (4)
- (iii) Mention the Interconnection issues. (2)
- 13.(a)(i) Discuss the features of Ipv4 and Ipv6. (4)
- (ii) Describe in detail about Ipv6 with unicast, multicast, any cast and local addresses. (12)
- OR
- 13.(b) Explain congestion control mechanism with relevant sketches. (16)

14.(a) Explain in detail about the following:

(i) TCP

(6)

(ii) UDP

(6)

(iii) SCTP

(4)

OR

14.(b) With necessary diagram explain in detail about SNMP and FTP.

(16)

15.(a) Explain with architecture of Digital cross connect systems.

(16)

OR

15.(b) Explain the TST and STS switching techniques and also compare the complexities of both the techniques.

(16)
