

2/5/13

B.E/B.TECH (FULL-TIME) DEGREE EXAMINATIONS, APR/MAY 2013

ELECTRONICS AND COMMUNICATION ENGINEERING

VI SEMESTER

43

EC 383 –COMPUTER NETWORKS

(REGULATIONS 2004)

Time: 3 hours

Maximum Marks: 100

Answer ALL questions

PART A – (10 x 2 = 20 marks)

1. What are the goals of computer networks
2. Explain why layering is required in data communication architecture
3. What is the significance of twisting in twisted pair cable?
4. What are the advantages of Random Access Protocol
5. Mention any two differences between switches and Hubs
6. Write short notes on gateways
7. What are the advantages of IPV6 protocol
8. List out the differences between circuit switching and packet switching
9. How is HTTP related to WWW
10. Define the term cryptography?

PART-B (5 × 16 = 80 Marks)

11 Explain in detail the architecture and functions of all layers of Open System Interconnection reference model for Computer Networks

- 12 a) (i) Explain the sliding window protocol with example (10)
- (ii) Write short notes on RS232-C and SONET (6)

(OR)

- 12 b) (i) Explain non persistence, 1- persistence and p – persistence CSMA protocol in detail (12)
(ii) What is the collision period in CSMA/CD and how long it takes a station to detect a collision. (4)

13 a) What do you meant by congestion and how the congestion control is implemented in TCP/IP
(OR)

13 b) Discuss about the need for internetworking and the problems in internetworking.

14 a) Write short notes on

- i. ARP (6)
- ii. RARP (4)
- iii. ICMP (6)

(OR)

14 b) Explain all the fields of IPv4 datagram in detail.

15 a) Discuss about HTTP and FTP in detail.

(OR)

15 b) With a neat diagram, discuss in detail about the SNMP Architecture and its associated components.
