

Reg. No. :

Question Paper Code : Z 9358

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2009.

Eighth Semester

Computer Technology

(Common to 5 Year M.Sc. Information Technology and 5 Year M.Sc. Software Engineering)

XCS 483 — NETWORK PROTOCOLS

(Regulation 2003)

Time : Three hours

Maximum : 100 marks

Answer ALL questions

PART A — (10 × 2 = 20 Marks)

1. What is a protocol architecture?
2. What is Backpressure and Choke packet?
3. Differentiate Unicasting from Multicasting with an example.
4. What is Mobile IP?
5. What is remote login?
6. Differentiate TFTP and TELNET with an example.
7. List the various services of e-mail server.
8. What are the advantages of VOIP?
9. What is a firewall?
10. List out the Services of TCP/IP.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the functionalities of Routing IP datagram with neat diagram. (16)

Or

- (b) Describe the following :
(i) Reliable Stream Transport Service (8)
(ii) Exterior Gateway Protocols. (8)

12. (a) (i) Explain the architecture of Mobile IP. (10)
(ii) Explain the technique of Internet Multicasting. (6)

Or

- (b) Explain BOOTP and DHCP with state diagram. (16)

13. (a) (i) Describe the architecture of DNS with suitable examples. (10)
(ii) Explain any two applications of DNS. (6)

Or

- (b) Explain the Architecture, Implementation and Working of FTP and TFTP. (16)

14. (a) Explain the techniques of the following :
(i) SMTP (4)
(ii) POP (4)
(iii) IMAP (4)
(iv) MIME (4)

Or

- (b) (i) Discuss the application of World Wide Web with an example. (8)
(ii) Describe the techniques of Voice and Video Over IP. (8)

15. (a) (i) Explain the various security requirements and attacks (8)
(ii) Discuss the techniques of Internet Management (SNMP). (8)

Or

- (b) (i) Explain briefly the significance of Internet security and Firewall design. (8)
(ii) Discuss the Security associations of IPV6 security. (8)