B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2012.

Sixth Semester

Electrical and Electronics Engineering

CS 2363/CS 65/10144 CS 503 — COMPUTER NETWORKS

(Regulation 2008)

Time: Three hours Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- Give the basic building blocks of network. 1.
- What is FDDI? 2.
- 3. What is internetworking?
- What is IPV6? 4.
- Give the functions of ARP. 5.
- Define congestion. 6.
- 7. Define cryptography.
- What is PGP? 8.
- What is HTTP? 9.
- What are overlay networks? 10.

PART B — $(5 \times 16 = 80 \text{ marks})$

| 11. | (0) | (i) | Discuss about the architecture of computer network with sketches. |
|-----|-----|------|---|
| 11. | (a) | (1) | (8) |
| | | (ii) | Explain the IEEE 802.3 standard. (8) |
| | | | Or |
| | (b) | Expl | ain the different approaches of Framing and Encoding in detail. (16) |
| 12. | (a) | (i) | Explain in detail about Internet control message protocol. (8) |
| | | (ii) | What is the purpose of routing? Explain flooding algorithm for routing the packets in detail. (8) |
| | | | Or |
| | (b) | Exp | lain in detail the dynamic host configuration protocol. (16) |
| 13. | (a) | (i) | Explain the User Datagram Protocol (UDP) in detail. (8) |
| | | (ii) | What is flow control? Explain its methodology and techniques. (8) |
| | | | Or |
| | (b) | Exp | lain TCP congestion control technique. (16) |
| 14. | (a) | (i) | Write a brief note on JPEG standards. (8) |
| | | (ii) | Explain in detail the MPEG standards and its significance. (8) |
| | | | Or |
| | (b) | (i) | What is IP security? Explain the functions and working of IP security with suitable diagram. (8) |
| | | (ii) | What is firewall? Describe briefly the functional operation of firewall in Networking. (8) |
| 15. | (a) | (i) | Discuss about the Domain Name Systems (DNS) in computer networking. |
| | | (ii) | Write short note on email services. (8) |
| | | | Or |
| | (b) | (i) | Explain the importance of SNMP with its structure and format. (12) |
| | | (ii) | Describe briefly the structure, functions and features of File Transfer Protocol. (4) |

11287