Reg.	No.	:	******	 	

Eighth Semester B.Tech. Degree Examination, November 2015 (2008 Scheme)

08.803 : COMPUTER COMMUNICATION (T)

Time: 3 Hours

Max. Marks: 100

PARI

Answer all questions.

- Compare OSI Reference layering with TCP/IP layering.
- 2. Consider sending a packet of F bits over a path of Q links. Each link transmit a R bps. The network is packet switched datagram network and assumed to be lightly loaded so that queuing delay is negligible. Propagation delay = 0. If each packet has 2h bits of header, then estimate how long it take to send the packet?
- 3. Explain the structure of MAC address.
- Briefly explain salient features of broadcast and multicast routing.
- 5. Compare and contrast link state and distance vector routing algorithms.
- 6. Distinguish between congestion control and flow control.
- 7. Explain ICMP. What are the different ICMP message types?
- 8. What do you mean by packet filtering? What are the different filtering policies?
- 9. Explain the need for network intrusion detection systems.
- 10. Explain how integrity of message can be ensured using digital signatures.

 $(10\times4=40 \text{ Marks})$



PART B

Answer any two questions from each Module.

Module - I

- 11. Explain how reliable data transfer can be achieved using stop and wait protocol.
- 12. Explain CSMA/CD as a multiple access protocol for Ethernet.
- 13. Discuss spanning tree based broadcast routing strategies. What are the limitations of this method?

Module - II

- 14. Discuss the important differences between IPv6 and IPv4 datagram formats.
- 15. Explain TCP congestion control algorithm.
- 16. Explain how MPLS improve the speed of IP routers.

Module - III

- 17. Discuss confidentiality and authentication associated with secure communication.
- 18. Explain DOS attacks.
- 19. Briefly explain the features provided by IPSec protocol suite. (6×10=60 Marks)