G 1640

Reg. No..............................

Name..................................

B.TECH. DEGREE EXAMINATION, MAY 2015

Eighth Semester

Branch : Electronics and Communication Engineering

EC 010 802—COMMUNICATION NETWORKS (EC)

(New Scheme—2010 Admissions)

[Regular/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 *marks.*

1. Mention the advantages and disadvantages of Tree topology.
2. What is slotted ALOHA ?
3. Explain the concept of virtual networks.
4. Give an overview of ATM.
5. What is IPSEC ?

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 *marks.*

6. Compare circuit switching and packet switching.
7. What is CSMA/CD ?
8. Draw the packet format of IPV4 and IPV6.
9. Draw and explain the header structure of ATM.
10. Explain how a firewall does its function.

(5 × 5 = 25 marks)

Part C

Answer **all** *questions.*
Each question carries 12 *marks.*

11. With the aid of neat diagrams, explain different network topologies.

Or

12. Describe OSI reference model and TCP/IP model.

Turn over

13. Explain briefly MAC layer and LLC layer.

Or

14. Explain briefly different types of network devices used in lower layers of network model.

15. Explain distance vector routing and link state routing.

Or

16. What is CIDR ? How route aggregation is possible with CIDR ?

17. Discuss the various adaptation layers in ATM.

Or

18. Describe ATM signalling and routing.

19. Explain symmetric and asymmetric key cryptography.

Or

20. Write short notes on :

    (a) PGP.

    (b) SSL.

(5 × 12 = 60 marks)