

B.TECH. DEGREE EXAMINATION, MAY 2014**Eighth Semester**

Branch : Electronics and Communication Engineering

EC 010 802 – COMMUNICATION NETWORKS (EC)

(New Scheme–2010 Admissions)

[Regular]

Time : Three Hours

Maximum : 100 Marks

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

1. What are the responsibilities of Network Layer?
2. What is the difference between Pure ALOHA and Slotted Aloha protocol?
3. Explain Subnetting.
4. What services are provided by AAL?
5. What is meant by firewall?

(5 × 3 = 15 marks)

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

6. Explain the concept of circuit switching.
7. What is polling? Why is it used?
8. State the limitations of IPv4.
9. Explain ATM cell format.
10. How does PGP create a set of security parameters?

(5 × 5 = 25 marks)

Turn over

Part C

Answer all questions.

Each question carries 12 marks.

11. What is LAN? List and describe different topologies used for constructing networks.

Or

12. Explain OSI reference model in detail.

13. Mention the steps involved in CSMA/CD algorithm.

Or

14. Mention the functions of MAC and LLC layers.

15. Define Routing. Explain distance vector routing and link state routing.

Or

16. What is meant by ICMP? What are the different ICMP control and status messages?

17. What is the need for Adaptation layer in ATM? Justify with any two AAL protocols.

Or

18. How addressing is performed in ATM? Explain the protocols used for it.

19. What are the two protocols defined by IPSec? Explain.

Or

20. Define SSL. What are the services provided by SSL?

(5 × 12 = 60 marks)