F 3230 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Eighth Semester

Branch : Electronics and Communication Engineering

EC 010 802—COMMUNICATION NETWORKS (EC)

(New Scheme—2010 Admissions/Supplementary)

[Regular]

Time : Three Hours Maximum : 100 Marks

Part A

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

1. Specify the advantages of a star topology.
2. How does a repeater extend the length of a LAN ?
3. Explain the purpose of ARP.
4. Explain the different AAL.
5. What is a digital signature ?

(5 x 3 = 15 marks)

Part B

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

6. Define the term layers and protocols.
7. What is polling ? Name different polling methods.
8. What are the different types of addresses IPv6 allows ?
9. Write a note on signalling adaptation layer.
10. How does PGP create a set of security parameters ?

(5 x 5 = 25 marks)

Part C

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

11. Explain the concept of message switching. Distinguish between circuit switching and packet switching.

Or

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

Turn over

13. What is meant by carrier sense multiple access ? Mention the steps involved in CSMA/CD algorithm.

Or

14. Define bridge and explain the type of bridges.

15. Define routing. How the packet cost referred in distance vector routing and link state routing ?

Or

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

17. Name the ATM layers and their functions.

Or

18. Explain ATM header structure with neat diagram.

19. Explain IPSec architecture with neat diagram.

Or

20. Explain symmetric and asymmetric key cryptography in detail.

(5 × 12 = 60 marks)