April 2024

<u>Time - Three hours</u> (Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
 - 2. Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.]

PART - A

- 1. Differentiate intranet from extranet.
- 2. Which type of address can be recognized by Routers?
- 3. Name some services provided by the application layer.
- 4. Define Fast Ethernet.
- 5. What is subnetting?
- 6. Why do we need QoS?
- 7. Differentiate public key cryptography from private key cryptography.
- 8. What is PGP?
- 9. List out the levels of RAID.
- 10. What is Eaves Dropping?

[Turn over.....

PART - B

11. (a) Explain about any three topologies with necessary diagrams.

(Or)

- (b) Explain about Twisted pair and Fiber optics transmission media with necessary diagrams.
- 12. (a) (i) Analyze the performance of 802.11a and 802.11n protocols. (7)

(ii) Explain about Token bus (802.4).(7)

(Or)

- (b) (i) Explain about the different layers in Service Provider Networks for WAN networks. (7)
 - (ii) Explain about circuit switched networks. (7)
- 13. (a) Explain about IGMP and ARP protocols.

(Or)

- (b) Name the Application Layer Protocols. Explain any two of them with neat sketches.
- 14. (a) (i) Explain the principles of network security.(7)
 - (ii) Explain the different types of attack.(7)

(Or)

- (b) Explain RSA algorithm steps and write down its encryption and decryption processes (use two prime numbers P=11 and Q=17).
- 15. (a) Explain about Hackers Techniques.

(Or)

- (b) Write short notes on
 - (i) Firewall. (7)
 - (ii) Intruder Detection systems. (7)

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