Reg. No. :

Question Paper Code: 52441

M.E. DEGREE EXAMINATION, NOV 2016

First Semester

Computer Science and Engineering (With Specialization in Networks)

15PNE101 - DESIGN AND MANAGEMENT OF COMPUTER NETWORKS

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Network topology that supports bidirectional links between each possible node is

    (a) Ring   (b) Star   (c) Tree   (d) Mesh

2. In Which Routing method do all the Routers have a common Database

    (a) Distance vector   (b) Link state
    (c) Link vector   (d) Distributed

3. Routers function in Which layers

    (a) Physical and Datalink   (b) Physical Datalink and Network
    (c) Datalink and Network   (d) Network and Transport

4. Ether LAN Uses

    (a) Polar encoding   (b) Differential Manchester encoding
    (c) Manchester encoding   (d) NRZ

5. Which of the following device is used with an X.25 Network to provide service to asynchronous terminals

    (a) Repeater   (b) Bridges
    (c) Gateway   (d) Packet assembled

6. Analyze how network traffic is characterized.

7. Define addressing?

8. What are the goals of network security mechanisms?

9. What is an enterprise network?

10. Define network management?

PART - C (5 x 16 = 80 Marks)

11. (a) Explain about hierarchical network design. (16)

Or

(b) Describe the secure network design topologies. (16)

12. (a) Explain the procedure of designing a model for naming. (16)

Or

(b) Explain the various factors to be taken into account for selecting switching and routing protocols. (16)

13. (a) Explain in detail the design procedure of any one network security mechanism. (16)

Or

(b) What is modularizing security design? Explain in detail. (16)

14. (a) Explain in detail the campus network design. (16)

Or

(b) Explain about WAN design in detail. (16)

15. (a) Describe the network management architecture. (16)

Or

(b) Explain about selecting network management tools and protocols. (16)

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