Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code: 52438

M.E. DEGREE EXAMINATION, NOV 2016

Elective

Computer Science and Engineering (With Specialization in Networks)

15PNE512 - NETWORK PROTOCOLS

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. TCP/IP model does not have _____ layer but OSI model have this layer.

    (a) session layer   (b) presentation layer
    (c) application layer   (d) both (a) and (b)

2. The physical layer is responsible for

    (a) line coding   (b) channel coding
    (c) modulation   (d) all the above

3. Channel bonding provides

    (a) higher data rate   (b) lower data rate
    (c) does not affect data rate   (d) none of these

4. Which one of the following algorithm is not used in asymmetric-key cryptography?

    (a) RSA algorithm   (b) diffie-hellman algorithm
    (c) electronic code book algorithm   (d) none of these

5. ATM uses the

    (a) asynchronous frequency division multiplexing
    (b) asynchronous time division multiplexing
    (c) asynchronous space division multiplexing
    (d) none of these

PART - B (5 x 3 = 15 Marks)

6. Compare presentation layer and application layer.

7. Why routing protocols are needed?

8. Analyze the available network monitoring features?

9. Which is more effective public key encryption or private key encryption?

10. Why PPP protocol is required between peers?

PART - C (5 x 16 = 80 Marks)

11. (a) Briefly explain the concepts of data transfer through network layer.   (16)

Or

   (b) How does a network topology affect your decision in setting up a network.   (16)

12. (a) State the need for routing protocols? Analyze the available network routing protocols.   (16)

Or

   (b) Describe in detail about MPLS? How multiple protocol problems are solved in MPLS.   (16)

13. (a) What are the possible ways for a user to access the system? Analyze the most effective access mechanisms?   (16)

Or

   (b) Explain in detail about the MIB group which contains the information about physical location of the component.   (16)

14. (a) Discuss in detail about private and public key encryption mechanisms.   (16)

Or

   (b) Write the notes on ECC architecture encryption, decryption and security.   (16)

15. (a) Write about WIMAX of MAN network.   (16)

Or

   (b) What is frame relay? How frame relay works in an ISDN?   (16)

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