M 9738

V Semester B.C.A. Degree (CCSS – Reg./Supple./Improv.)
Examination, November 2015
BCA – Core Course
5B14 BCA : DATA COMMUNICATION AND COMPUTER NETWORKS

Time : 3 Hours

Max. Weightage : 21

SECTION – A

Answer all questions. Weightage for a bunch of **four** question is **one**.

1. Point to point transmission with one sender and one receiver is called _____.

2. A set of layers and protocols is called a _____.

3. Dialog control is managed by the _____ layer.

4. _____ are specialized computers that connect three or more transmission lines.   (W. = 1)

5. A reliable connection oriented protocol of the transport layer is _____.

6. _____ ciphers reorder the letters to disguise the message.

7. Algorithms that change routing decisions based on changes in topology and traffic are called _____.

8. A connection that allows traffic in only one way is called _____.   (W.=1)

SECTION – B

Answer **any 5** questions. Weightage **1 each**.

9. Define topology.

10. What is broadcasting ?

11. What is MAN ?

P.T.O.

12. What is bit stuffing ?

13. What are now adaptive algorithms ?

14. What is cryptography ?

15. What is addressing ?

16. What is asynchronous data transmission ?

(5× 1=5)

SECTION – C

Answer **any 5** questions. Weightage **2 each**.

17. Classify networks.

18. Explain framing techniques.

19. Explain TCP/IP layers.

20. Explain Dijkstra's shortest path routing algorithm.

21. Discuss design issues in network layer.

22. Explain substitution ciphers.

23. Discuss optimality principle.

24. Compare TCP and UDP.

(5× 2=10)

SECTION – D

Answer **any 1** question. Weightage **4 each**.

25. Explain about transmission media.

26. Explain the RSA algorithm.

(1× 4=4)

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