Reg. No. : ....

Name : ....

Sixth Semester B.C.A. Degree (C.B.C.S.S. – OBE – Regular/ Supplementary/Improvement) Examination, April 2024
(2019 to 2021 Admissions)
Core Course
6B19BCA : DATA COMMUNICATION AND NETWORKS

Time : 3 Hours

Max. Marks : 40

Part – A
(Short Answer)

Answer **all** questions.

(6×1=6)

1. Define the term Computer Networks.

2. Mention any two functions of data link layer.

3. What do you mean by bit stuffing ?

4. What do you mean by routing ?

5. What do you mean by three way handshaking ?

6. What do you mean by cryptography ?

Part – B
(Short Essay)

Answer **any 6** questions.

(6×2=12)

7. Name any two properties of Computer Networks.

8. Compare synchronous and asynchronous data transmission.

9. Write note on any one flow control mechanism.

10. Short note on adaptive routing algorithm.

11. Short note on substitution cipher.

12. Compare simplex and half duplex transmission.

13. Write short note on Dijikstras shortest path algorithm.

14. Mention functionalities of transport layer.

PART – C
(Essay)

Answer **any 4** questions.   (4×3=12)

15. Write short note on secret key cryptography.

16. Write short note on addressing in networks.

17. Explain any one error detection mechanism.

18. Write short note on classification of computer networks.

19. Write short note on hierarchical routing.

20. Describe various steps in RSA algorithm.

PART – D
(Long Essay)

Answer **any 2** questions.   (2×5=10)

21. Explain with a neat diagram star and bus topology.

22. Explain error correction in computer networks.

23. Explain the concepts of congestion control mechanism in networks.

24. Compare TCP and UDP protocols.

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