K22U 0345

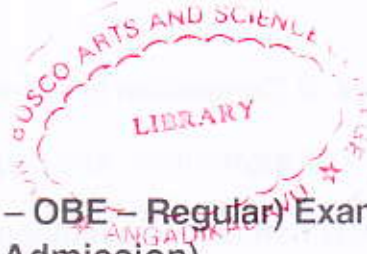Reg. No. : ....

Name : ....

VI Semester B.C.A. Degree (CBCSS – OBE – Regular) Examination, April 2022
(2019 Admission)
Core Course
6B19 BCA : DATA COMMUNICATION AND NETWORKS

Time : 3 Hours

Max. Marks : 40

PART – A
(Short Answer)

Answer **all** questions :

(6×1=6)

1. Expand LAN and WAN.

2. Define Computer Network.

3. What is framing ?

4. What is a datagram in network communication ?

5. Define cryptography.

6. What is Hamming Code ?

PART – B
(Short Essay)

Answer **any 6** questions :

(6×2=12)

7. What is point to point and multipoint Line Configuration ?

8. List the advantages and disadvantages of mesh topology.

9. Write short note on bit stuffing.

10. What are the functions of Physical Layer ?

11. Differentiate Adaptive and Non-Adaptive Routing.

P.T.O.

12. What are the causes of Congestion in networks ?

13. What is symmetric and asymmetric key cryptography ?

14. Explain the three-way handshaking method for connection establishment.

PART – C
(Essay)

Answer **any 4** questions : (4×3=12)

15. Explain the Guided transmission mediums : coaxial cable and twisted pair cables.

16. Discuss Synchronous and asynchronous transmission.

17. Write note on Simplex Stop and Wait Protocol.

18. Explain in detail about flow based and hierarchal routing.

19. Discuss the functions and design issues of Transport Layer.

20. Write note on DES Chaining.

PART – D
(Long Essay)

Answer **any 2** questions : (2×5=10)

21. Explain in detail about OSI Reference Model.

22. Discuss in detail about the congestion control algorithms (Leaky Bucket and Token Bucket).

23. Explain in detail and compare the transport layer protocols TCP and UDP.

24. Write and Explain the working of the RSA Algorithm.

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