



**K23U 0481**

**Reg. No. :** .....

**Name :** .....

**VI Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/  
Improvement) Examination, April 2023  
(2019 and 2020 Admissions)  
CORE COURSE IN COMPUTER SCIENCE  
6B12CSC : Data Communication and Computer Networking**

**Time :** 3 Hours

**Max. Marks :** 40

**PART – A  
(Short Answer)**

Answer **all** questions.

**(6×1=6)**

1. Define TELNET.
2. Define LAN.
3. What is meant by network protocol ?
4. What is ARQ ?
5. Define routing in computer network.
6. What is meant by point to point ?

**PART – B  
(Short Essay)**

Answer **any 6** questions.

**(6×2=12)**

7. Differentiate FTP and HTTP.
8. What are the important components of data communication ?
9. Illustrate bit stuffing.

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10. What is the function of physical layer ?
11. What is WAN ?
12. Explain optimality principle.
13. Explain hierarchical routing.
14. What is SMTP ? Explain.

**PART – C  
(Essay)**

Answer **any 4** questions.

**(4×3=12)**

15. What are the different transport layer reliability services ? Explain.
16. Explain Dijkstras shortest path algorithm with suitable example.
17. Explain simplex, half duplex and duplex.
18. What is stop and wait protocol ? Explain.
19. Describe network layer protocols.
20. Differentiate UDP and TCP.

**PART – D  
(Long Essay)**

Answer **any 2** questions.

**(2×5=10)**

21. What are the different transport layer protocols ? Explain.
  22. Explain congestion control algorithms.
  23. What is topology ? Explain.
  24. Differentiate between OSI and TCP/IP model.
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