

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2024**

**(Regular/Improvement/Supplementary)**

**COMPUTER SCIENCE**

**GBCS6B13T: COMPUTER NETWORKS**

**Time: 2 Hours**

**Maximum Marks: 60**

**SECTION A: Answer the following questions. Each carries *two* marks.**

**(Ceiling 20 Marks)**

1. What is Congestion control?
2. Comment on UDP.
3. What is DTE? Give example.
4. Mention the use of Routers in network.
5. Differentiate between public IP and private IP in IPV4.
6. What is NAT?
7. What is substitution cipher?
8. Comment on Hash function.
9. What is Huffman code?
10. List any two advantages and disadvantages of star topology.
11. What is RSA digital signature scheme?
12. Write a short note on FTP.

**SECTION B: Answer the following questions. Each carries *five* marks.**

**(Ceiling 30 Marks)**

13. Explain circuit switching and packet switching with its advantages and disadvantages.
14. Discuss the architecture of DNS.
15. Elaborate TCP/IP layer model.
16. Explain different types of ALOHA.
17. Discuss RSA algorithm.
18. Describe various protocols used in Application layer.
19. Differentiate between Block cipher and Stream cipher.

**SECTION C: Answer any *one* question. Each carries *ten* marks.**

20. What is Data Link Layer? Explain its functions.
21. Explain Distance Vector Routing Algorithm.

**(1 x 10 = 10 Marks)**