

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2026

(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 pure ALOHA?
2. How stop-and-wait ARQ works?
3. What is NAT?
4. Comment on Ethernet.
5. What is message Digest?
6. Differentiate between Router and Bridge.
7. What is Packet Switching?
8. Define adaptive and non-adaptive routing.
9. What is the purpose of DNS?
10. Define multicast routing.
11. What is the need of SNMP in computer network?
12. Define Remote login.

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

(Ceiling 30 marks)

13. Write a short note on longitudinal redundancy check.
14. Describe the working principle of CSMA/CD.
15. Differentiate between Symmetric key and Asymmetric key encryption.
16. How does UDP differ from TCP? Explain the concept of connection oriented and connectionless services.
17. Explain distance vector routing algorithm.
18. What are the functions of Application Layer? Explain the working of FTP protocol.
19. Explain different types of network topologies.

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

20. Explain ISO/OSI model with suitable diagram.
21. What is Encryption? Explain RSA algorithm with suitable example.

(1 × 10 = 10 Marks)