SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025

(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 the advantage of slotted ALOHA?

2. What is a Gateway?

3. List the transport layer protocols.

4. What is the purpose of DNS?

5. What is Router?

6. Define NAT.

7. Mention the functions of network layer in ISO/OSI model.

8. What is FTP?

9. Differentiate between unicast and multicast addressing.

10. What is DTE? Give any two examples.

11. Define Ring topology.

12. What is substitution cipher? Give an example.

SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)

13. Write short notes on various categories of computer networks?

14. What are the functions of Data Link Layer? Explain it.

15. What is IP address? Explain IPV4 addressing format and its classes.

16. Differentiate between UDP and TCP.

17. Write an account on HTTP.

18. Compare packet switching and message switching technique.

19. Explain RSA Digital Signature Scheme.

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

20. Explain parity bit and CRC methods of error detection with suitable example.

21. Illustrate DES Algorithm with a neat diagram.

(1 × 10 = 10 Marks)