1. Explain store-and-forward packet switching.

2. List two computer network routing strategies.

3. What are the network layer's two core transport layer services?

4. Why limit traffic in congestion control?

5. How does computer flooding routing work?

6. Explain end-to-end congestion control.

7. Why load shedding in congestion control?

8. Create a routing algorithm to determine the shortest path between network nodes.

9. Limit network segment bandwidth using traffic limiting.

10. Create a network-assisted end-to-end congestion control policy.

11. During congestion, prioritize real-time apps over non-essential traffic.

12. Compare distance vector and link state packet routing.

13. Assess how traffic shaping affects network performance and congestion control.

14. Assess how admission control prevents network congestion.

15. Assess how well QoS techniques match application needs.

16. Justify using virtual circuit networks in critical delivery and performance situations.

17. Assess computer network flooding routing's pros and cons.

18. Evaluate network congestion management strategies.

19. Compare IPv4 and IPv6, emphasizing IPv6's benefits.

20. Contrast datagram and virtual circuit networks.

Compare unicasting, multicasting, and broadcasting.

22. What are the transport layer's key services to the network protocol stack's upper tiers?

23. Name common transport protocol transport service primitives.

24. List the main TCP segment header components.

25. Explain how transport protocol addressing affects communication.

26. Evaluate transport protocol connection establishment and release.

27. Explain why transport protocols need error and flow control.

28. Explain how socket programming helps network communication.

29. Create a transport protocol flow control system for efficient data delivery.

30. Create a TCP/UDP client-server application using socket programming.

31. Assess network performance based on connection management strategies.

32. Evaluate TCP sliding window and timer management for data reliability.

33. Compare UDP and TCP for real-time applications.

34. Assess UDP-based remote procedure call (RPC) efficacy.

35. Create a communication-specific transport service primitive.

36. Test TCP congestion control techniques.