

📖 EASY (10 Questions)

Q1. Routing is the process of:

- A. Switching frames within a LAN
- B. Forwarding packets between networks
- C. Encrypting data
- D. Resolving MAC addresses

Q2. Which type of routing requires manual configuration?

- A. Dynamic routing
- B. Default routing
- C. Static routing
- D. Adaptive routing

Q3. Which device makes routing decisions?

- A. Hub
- B. Switch
- C. Router
- D. Bridge

Q4. Which routing protocol is distance-vector?

- A. OSPF
- B. IS-IS
- C. RIP
- D. BGP

Q5. Static routes are best suited for:

- A. Large dynamic networks
- B. Small, stable networks
- C. Highly redundant networks
- D. Internet backbone

Q6. Which command configures a static route in Cisco IOS?

- A. route add
- B. ip route
- C. add route
- D. static route

Q7. Which routing protocol uses hop count as its metric?

- A. OSPF
- B. EIGRP
- C. RIP
- D. BGP

Q8. Which type of routing automatically adapts to topology changes?

- A. Static
- B. Default
- C. Dynamic
- D. Host routing

Q9. Which routing table entry is manually configured?

- A. C
- B. R
- C. O
- D. S

Q10. Which routing protocol is link-state?

- A. RIP
- B. IGRP
- C. OSPF
- D. EGP

☐ MEDIUM (15 Questions)

Q11. What is the main disadvantage of static routing?

- A. High CPU usage
- B. Poor scalability
- C. Slow convergence
- D. High bandwidth usage

Q12. Which routing protocol uses periodic full routing updates?

- A. OSPF
- B. EIGRP
- C. RIP
- D. IS-IS

Q13. What is convergence in routing?

- A. Packet encryption
- B. Agreement on routing tables
- C. Route summarization
- D. Metric calculation

Q14. Which routing protocol uses Dijkstra's algorithm?

- A. RIP
- B. EIGRP
- C. OSPF
- D. BGP

Q15. Which routing protocol supports VLSM?

- A. RIP v1
- B. IGRP
- C. OSPF
- D. RIPv1 only

Q16. Which metric is used by OSPF?

- A. Hop count
- B. Bandwidth (cost)
- C. Delay only
- D. Reliability

Q17. Which routing protocol is classless?

- A. RIP v1
- B. IGRP
- C. RIPv2
- D. EGP

Q18. Which route is used when no specific route exists?

- A. Host route
- B. Network route
- C. Default route
- D. Floating route

Q19. Which administrative distance indicates the most trusted route?

- A. 120
- B. 110
- C. 90
- D. 1

Q20. Which routing update type sends only changes?

- A. Periodic update
- B. Full update
- C. Triggered update
- D. Broadcast update

Q21. Which protocol uses multicast address 224.0.0.9?

- A. RIP v1
- B. RIP v2
- C. OSPF
- D. EIGRP

Q22. Which routing protocol is best suited for large enterprise networks?

- A. RIP
- B. OSPF
- C. RIPv1
- D. Static routing

Q23. Which route has the lowest administrative distance?

- A. RIP
- B. OSPF
- C. EIGRP (internal)
- D. Static route

Q24. Which routing protocol supports unequal-cost load balancing?

- A. RIP
- B. OSPF
- C. EIGRP
- D. BGP

Q25. Which command displays routing protocol information?

- A. show show route
 - B. show ip protocols
 - C. show routing
 - D. show version
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HARD (15 Questions)

Q26. Which routing protocol is considered hybrid?

- A. RIP
- B. OSPF
- C. EIGRP
- D. BGP

Q27. Which factor most affects routing convergence time?

- A. Network size and protocol design
- B. Cable length
- C. MAC addressing
- D. VLAN count

Q28. Which routing protocol uses split horizon to prevent loops?

- A. OSPF
- B. RIP
- C. IS-IS
- D. BGP

Q29. What is a floating static route?

- A. Static route with lowest AD
- B. Backup static route with higher AD
- C. Dynamic static route
- D. Default static route

Q30. Which routing protocol uses areas to improve scalability?

- A. RIP
- B. EIGRP
- C. OSPF
- D. IGRP

Q31. Which routing protocol exchanges routing information using TCP?

- A. RIP
- B. OSPF
- C. EIGRP
- D. BGP

Q32. Which routing protocol uses path vector mechanism?

- A. RIP
- B. OSPF
- C. EIGRP
- D. BGP

Q33. Which routing protocol is limited to 15 hops?

- A. OSPF
- B. RIP
- C. EIGRP
- D. IS-IS

Q34. Which administrative distance value is assigned to OSPF?

- A. 120
- B. 110
- C. 90
- D. 1

Q35. Which routing protocol converges fastest in large networks?

- A. RIP
- B. Static routing
- C. OSPF
- D. Default routing

Q36. Which routing update method reduces bandwidth usage?

- A. Periodic full updates
- B. Triggered incremental updates
- C. Broadcast flooding
- D. Static updates

Q37. Which routing protocol supports authentication?

- A. RIP v1
- B. RIP v2
- C. Both RIP v2 and OSPF
- D. Static routing

Q38. Which route entry code represents OSPF in routing table?

- A. R
- B. D
- C. O
- D. S

Q39. Which routing protocol uses cost calculated from bandwidth?

- A. RIP
- B. EIGRP
- C. OSPF
- D. BGP

Q40. Which statement best describes dynamic routing?

- A. Manual route maintenance
- B. Fixed path routing
- C. Automatic route discovery and updates
- D. No routing tables used