100 CCNA Interview Questions

1. What is the OSI model and its layers?

2. Explain the difference between TCP and UDP.

3. What is subnetting and why is it used?

4. How does ARP (Address Resolution Protocol) work?

5. What are the differences between IPv4 and IPv6?

6. What is a VLAN and why is it used?

7. Explain the Spanning Tree Protocol (STP).

8. What are the different types of network topologies?

9. How does NAT (Network Address Translation) work?

10. What is the difference between a router and a switch?

11. What are the main types of routing protocols?

12. Explain the difference between static and dynamic routing.

13. What is the purpose of an access control list (ACL)?

14. How do you configure a VLAN on a Cisco switch?

15. What is a trunk port in networking?

16. What is the difference between a broadcast and a collision domain?

17. What are the different types of IP addresses?

18. What is the difference between a hub, switch, and router?

19. How does DHCP work?

20. What is the purpose of a default gateway?

21. Explain OSPF (Open Shortest Path First) protocol.

22. What is the difference between EIGRP and RIP?

23. How does BGP (Border Gateway Protocol) work?

24. What is HSRP (Hot Standby Router Protocol)?

25. What is EtherChannel and its benefits?

26. What is the difference between STP and RSTP?

27. How do you troubleshoot network connectivity issues?

28. What is CDP (Cisco Discovery Protocol)?

29. Explain port security in Cisco switches.

30. What is the difference between Layer 2 and Layer 3 switches?

31. What is QoS (Quality of Service) in networking?

32. What is a MAC address and why is it important?

33. Explain different types of WAN technologies.

34. What is PPP (Point-to-Point Protocol)?

35. What is GRE tunneling?

36. How does VPN (Virtual Private Network) work?

37. Explain the concept of redundancy in networking.

38. What is an IP SLA?

39. How do you configure SSH on a Cisco device?

40. What is a routing table?

41. Explain Cisco Packet Tracer and its uses.

42. What is the difference between routed and routing protocols?

43. What is a floating static route?

44. What is an extended ACL?

45. How does port forwarding work?

46. What are the differences between TCP and IP?

47. What is a network loop and how do you prevent it?

48. How does MPLS (Multiprotocol Label Switching) work?

49. Explain the purpose of a DMZ in network security.

50. What is the difference between LAN, MAN, and WAN?

51. What is port mirroring?

52. What is a route summarization?

53. What is split-horizon in networking?

54. What is the difference between PAT and NAT?

55. What is a VTP (VLAN Trunking Protocol)?

56. Explain the concept of microsegmentation.

57. How do you secure a network?

58. What is the purpose of Syslog?

59. How does load balancing work?

60. What is the difference between SNMPv2 and SNMPv3?

61. How does IGMP (Internet Group Management Protocol) work?

62. What is a broadcast storm?

63. What is IPv6 autoconfiguration?

64. What is BFD (Bidirectional Forwarding Detection)?

65. How do you configure port security on a switch?

66. What is a switch stack?

67. What are the different types of fiber optic cables?

68. What is the significance of the MTU (Maximum Transmission Unit)?

69. Explain the purpose of a proxy server.

70. What is a firewall and how does it work?

71. What are VRFs (Virtual Routing and Forwarding)?

72. What is a stateful firewall?

73. How does STP prevent loops?

74. What is IPsec and its components?

75. What is a GRE tunnel?

76. What is the significance of the administrative distance?

77. How does LACP (Link Aggregation Control Protocol) work?

78. What is a null route?

79. What is DHCP snooping?

80. What is a failover mechanism?

81. How does TACACS+ differ from RADIUS?

82. What are BGP attributes?

83. How do you troubleshoot a VLAN issue?

84. What is a shadow VLAN?

85. What is IPv6 anycast?

86. How does traffic shaping work?

87. How do you prevent VLAN hopping?

88. What is a sticky MAC address?

89. What is a control plane in networking?

90. What is BPDU guard?

91. How does a Cisco ASA firewall work?

92. What is an overlay network?

93. How does EAP (Extensible Authentication Protocol) work?

94. What is a floating static route?

95. What is a loopback interface?

96. What is IPv6 dual stack?

97. How does route redistribution work?

98. What is a TACACS+ server?

99. What is a data plane?

100. What is the difference between MPLS and traditional IP routing?