Question,Difficulty Level

"What is the primary function of a router in a network?",Easy "Explain the difference between TCP and UDP.",Easy

"What is an IP address, and how is it structured?",Easy "Define subnetting and its advantages.",Medium

"How does ARP (Address Resolution Protocol) work?",Medium

"What is the purpose of the OSI model, and what are its layers?",Medium "Explain the working of CSMA/CD in Ethernet networks.",Medium

"What is BGP (Border Gateway Protocol), and why is it important?",Hard "Describe how a three-way handshake works in TCP.",Hard

"What are VLANs, and how do they improve network efficiency?",Hard "How does a DNS query work, and what are its main components?",Hard "Differentiate between circuit switching and packet switching.",Easy "What is the purpose of NAT (Network Address Translation)?",Easy "Explain the difference between IPv4 and IPv6.",Easy

"Describe the function of a MAC address in networking.",Easy "What is DHCP, and how does it work?",Easy

"Explain the concept of network latency and bandwidth.",Easy "Define encapsulation and decapsulation in networking.",Medium "How does the sliding window protocol work?",Medium

"What is the difference between a hub, a switch, and a router?",Medium "Explain the role of the transport layer in networking.",Medium

"What is network congestion, and how can it be managed?",Medium "Describe the function of a firewall in network security.",Medium "Explain the concept of Quality of Service (QoS) in networking.",Medium "What are the different types of DNS records?",Medium

"Explain the concept of MPLS (Multiprotocol Label Switching).",Hard

"How does VPN (Virtual Private Network) ensure secure communication?",Hard "Describe the working of an Intrusion Detection System (IDS).",Hard

"What is the difference between symmetric and asymmetric encryption?",Hard "Explain the concept of SDN (Software-Defined Networking).",Hard

"What is the role of ICMP in network communication?",Hard "How does a load balancer distribute network traffic?",Hard "Explain the concept of network slicing in 5G.",Hard "Describe the working of a Zero Trust security model.",Hard