

DEBUG WITH SHUBHAM

TECHNICAL AND VLOGS



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<https://www.youtube.com/DebugWithShubham>



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Cognizant GenC 2025

TOP- 15

Computer Network

Interview

Question

With

Answers

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Q1. What is a Computer Network?

A computer network is a collection of interconnected devices that share data and resources.

Example: Internet, LAN

Q2. What is IP Address? Types of IP?

IP address uniquely identifies a device in a network.

IPv4 → 32-bit

Example → 192.168.1.1

IPv6 → 128-bit

Example → 2001:db8...

Q3. What is MAC Address?

MAC = Media Access Control Address

It is a unique hardware address given to every network device.

Fixed & burnt into NIC.

Q4. Difference Between IP Address & MAC Address

IP Address	MAC Address
Logical	Physical
Can change	Permanent
Layer 3	Layer 2

Q5. What is TCP vs UDP?

TCP	UDP
Connection-oriented	Connectionless
Reliable	Fast
Used in Web, Email	Used in Video streaming, Gaming

Q6. What is HTTP & HTTPS?

HTTP → Hyper Text Transfer Protocol

HTTPS → Secure HTTP (uses SSL/TLS encryption)

Q7. What is DNS?

DNS = Domain Name System

Converts domain name → IP

Example: google.com → 142.251.42.78

Q8. What is OSI Model?

7 Layers Names:

Physical

Data Link

Network

Transport

Session

Presentation

Application

Just naming layers is enough.

Q9. TCP/IP Model Layers

Network Interface

Internet

Transport

Application

Q10. What is Router, Switch, Hub?

Hub – broadcasts data to all devices

Switch – sends data intelligently to specific device

Router – connects different networks

Q11. What is LAN, MAN, WAN?

LAN → Local Area Network (Home, Office)

MAN → Metropolitan Area Network (City)

WAN → Wide Area Network (Internet)

Q12. What is Ping Command?

Ping checks network connectivity between two devices.

Use ICMP protocol.

Q13. What is Bandwidth & Latency?

Bandwidth → How much data can travel

Latency → Time delay in communication

Simple explanation enough.

Q14. What is Firewall?

Firewall protects network from unauthorized access & cyber attacks.

Q15. What is Packet?

Packet = Small chunk of data transmitted over network.

