NETWORKING BASICS

OSI Model:

1 Physical – cables and signals

2 Data Link – MAC, ARP

3 Network – IP addressing

4 Transport – TCP/UDP

5 Session – session control

6 Presentation – encryption

7 Application – HTTP, FTP

TCP/IP Model:

Application, Transport, Internet, Network Access

DNS:

Converts domain names to IP addresses.

HTTP vs HTTPS:

HTTP is plain text.

HTTPS uses SSL/TLS encryption.

IP Addressing:

IPv4, Private IPs, NAT.