Internet and Networking Revised

Context:  
The Internet is a global network that connects millions of computers and devices worldwide, enabling the transfer of data and communication. Each device connected to the Internet is assigned a unique IP address, which allows it to be identified on the network. Routers are essential network devices that direct traffic between different networks and ensure data reaches the correct destination. Modems connect a home or business to the Internet service provider. A Local Area Network (LAN) is a group of interconnected computers within a limited area, such as a home, school, or office. The Domain Name System (DNS) translates human-readable domain names (like www.example.com) into IP addresses. Data sent over the Internet is broken into packets and reassembled at the destination. Protocols like HTTP and HTTPS are used to access websites, ensuring structured communication.

# Answerable Questions

Q1: What is the Internet?

A1: A global network connecting computers and devices worldwide

Q2: What is the function of an IP address?

A2: To identify a device on the network

Q3: What does a router do?

A3: Directs data traffic between networks

Q4: What device connects a home to an Internet provider?

A4: Modem

Q5: What does LAN stand for?

A5: Local Area Network

Q6: What is the role of DNS?

A6: It translates domain names into IP addresses

Q7: How is data sent over the Internet?

A7: In the form of packets

Q8: What is a domain name?

A8: A human-readable address for a website

Q9: Which protocol is used to access websites?

A9: HTTP or HTTPS

Q10: Where is a LAN typically used?

A10: In homes, schools, or offices

# Semantic Questions

Q1: Why are routers important in networking?

A1: They ensure data reaches the correct destination

Q2: What links your home network to the Internet?

A2: A modem

Q3: Why is DNS necessary?

A3: Because humans use names instead of numeric IPs

Q4: What ensures structured communication over the web?

A4: Protocols like HTTP and HTTPS

Q5: How do devices communicate on the Internet?

A5: Through IP addresses and routing

Q6: What makes it possible to view websites?

A6: Web protocols and DNS

Q7: How is traffic managed in a network?

A7: Using routers and modems

Q8: What helps identify each device online?

A8: An IP address

Q9: What do you need to browse websites?

A9: A web browser and Internet connection

Q10: Why are packets used in data transfer?

A10: To efficiently break and reassemble information

# No-Answer Questions

Q1: What color is the fastest Wi-Fi signal?

A1: [No Answer]

Q2: Which router speaks the most languages?

A2: [No Answer]

Q3: How many social media apps live inside a modem?

A3: [No Answer]

Q4: What fruit powers the DNS system?

A4: [No Answer]

Q5: Where do websites go when they sleep?

A5: [No Answer]