

Q01. What is a standalone computer?

A01. A standalone computer works independently without being connected to any network.

Q02. What is a computer network?

A02. A computer network is a group of two or more devices (called nodes) connected together to exchange data and share resources like files, printers, and communicate.

Q03. What are the key components of a computer network?

A03. Key Components of a Computer Network

- 1) **Network Hardware:** Physical devices like nodes, routers, switches, cables, and network interface cards (NICs), used to build a computer network.
- 2) **Network Software:** Programs and operating systems that manage network functions.
- 3) **Protocols:** Rules that define how data is sent and received between devices.

Q04. What are the different types of computer network connections?

A04. Computer network connections are broadly categorized as Wired and Wireless.

- **Wired Connections:** Use physical cables (like Ethernet) to transmit data, offering high speed and stability.
- **Wireless Connections:** Use radio waves (like Wi-Fi, Bluetooth and Cellular Network) to transmit data without cables, providing mobility and convenience.

Q05. What is a node or client?

A05. Nodes or clients are the range of devices that can be connected to a computer network.
Examples are, Desktop, Smartphone and Smartwatch

Q06. Name the key network hardware devices and write their functions?

A06. Here are the key network hardware devices:

- **Network Interface Card (NIC)** – Enables devices to connect to a network.
- **Switch** – Connects devices within a network and manages data flow.
- **Wireless Access Point** – Extends wireless network connections.
- **Router** – Connects different networks and directs data packets.