

## **Computer Network LEC1 MCQ**

**What is the primary purpose of a computer network?**

- A) To increase the cost of communication
- B) To enable devices to share resources and communicate
- C) To limit access to information
- D) To create isolated systems

**Which of the following is a type of broadcast communication?**

- A) Unicast
- B) Multicast
- C) Limited Broadcast
- D) All of the above

**What does 'Multicast' refer to in networking?**

- A) One-to-One communication
- B) One-to-All communication
- C) One-to-Many communication
- D) None of the above

**Which technology allows people at distant locations to hold meetings?**

- A) Email
- B) Videoconferencing
- C) Instant Messaging
- D) Social Media

**Which of the following is NOT a form of computer-assisted communication?**

- A) Email
- B) Videoconferencing
- C) Traditional Mail
- D) Online Digital Library

**What type of broadcast is characterized by sending data to all devices in a network?**

- A) Unicast
- B) Multicast
- C) Limited Broadcast
- D) Broadcast (One-to-All)

**Which of the following statements is true regarding Limited Broadcast?**

- A) It sends data to all devices in the network.
- B) It sends data to a specific group of devices.
- C) It is the same as Unicast.
- D) It is not used in networking.

**In a computer network, which type of communication is most efficient for sending data to a single recipient?**

- A) Broadcast
- B) Multicast
- C) Unicast
- D) Anycast

**Which of the following best describes the term 'casting' in computer networks?**

- A) The process of creating a network
- B) The method of transmitting data from a source to one or more recipients
- C) The act of securing a network
- D) The design of network hardware

**Which type of network is designed to cover a large geographical area, such as a city or country?**

- A) LAN (Local Area Network)
- B) MAN (Metropolitan Area Network)
- C) WAN (Wide Area Network)
- D) PAN (Personal Area Network)

**If a network link fails, which of the following features ensures that communication can still occur?**

- A) Network Isolation
- B) Redundancy
- C) Bandwidth Limitation
- D) Network Segmentation

**In a multicast transmission, how is data delivered?**

- A) To all devices in the network
- B) To a specific group of subscribed devices
- C) To a single device only
- D) To devices in a random manner

**Which of the following best describes a Local Area Network (LAN)?**

- A) A network that connects devices over long distances
- B) A network that connects devices within a limited geographical area
- C) A network that connects devices using satellite communication
- D) A network that is only used for mobile devices

**What is the significance of network topology in computer networking?**

- A) It determines the physical layout of the network
- B) It defines the protocols used for communication
- C) It specifies the types of devices that can be connected

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- D) It is irrelevant to network performance

**What is the primary function of a switch in a network?**

- A) To route data between different networks
- B) To filter and forward packets within the same network
- C) To provide security by blocking unauthorized access
- D) To connect end devices to the internet

**Which device is primarily responsible for directing data packets between different networks?**

- A) Switch
- B) Hub
- C) Router
- D) Firewall

**What is the main purpose of a firewall in a network?**

- A) To increase the speed of data transmission
- B) To connect multiple devices within a local area network
- C) To monitor and control incoming and outgoing network traffic
- D) To store data for backup purposes

**Which of the following statements is true about routers?**

- A) They operate only at the physical layer of the OSI model.
- B) They can connect different types of networks.
- C) They are used to connect devices within the same local area network.
- D) They do not perform any filtering of data packets.

**In a network, what role does a client typically play?**

- A) It provides resources and services to other devices.
- B) It requests services and resources from servers.
- C) It routes data between different networks.
- D) It secures the network from unauthorized access.

**Which of the following is NOT a function of a switch?**

- A) Learning MAC addresses
- B) Forwarding frames based on MAC addresses
- C) Routing packets between different networks
- D) Creating a separate collision domain for each port

**What type of network device can be used to create a barrier between a trusted internal network and untrusted external networks?**

- A) Switch
- B) Router
- C) Firewall
- D) Hub

**Which layer of the OSI model do switches primarily operate at?**

- A) Application layer
- B) Transport layer
- C) Network layer
- D) Data link layer

**What is the main difference between a hub and a switch?**

- A) A hub can filter traffic, while a switch cannot.
- B) A switch can connect to multiple networks, while a hub cannot.
- C) A switch sends data only to the intended recipient, while a hub broadcasts to all ports.
- D) A hub operates at the network layer, while a switch operates at the data link layer.

**Which of the following devices is essential for connecting a local area network (LAN) to the internet?**

- A) Switch
- B) Router
- C) Firewall
- D) Repeater

**Which of the following best describes a switch's operation?**

- A) It operates at the application layer and manages user requests.
- B) It uses IP addresses to forward data packets.
- C) It creates a dedicated path for data between devices.
- D) It broadcasts data to all connected devices.

**Firewalls can be categorized into which of the following types?**

- A) Hardware and software firewalls
- B) Static and dynamic firewalls
- C) Open and closed firewalls
- D) Local and remote firewalls

**What is a common feature of managed switches compared to unmanaged switches?**

- A) They are less expensive.
- B) They provide advanced configuration options.
- C) They do not require power.
- D) They have fewer ports.

**What type of network topology is commonly used with switches?**

- A) Star topology
- B) Ring topology
- C) Bus topology
- D) Mesh topology

## **Computer Network LEC2 MCQ**



**Which of the following statements about firewalls is true?**

- A) Firewalls can only be hardware-based.
- B) Firewalls do not require configuration.
- C) Firewalls can be used to create a DMZ (Demilitarized Zone).
- D) Firewalls are only necessary for large networks.

**What is the primary function of a network interface card (NIC)?**

- A) To connect a computer to a network
- B) To manage network traffic
- C) To provide wireless connectivity
- D) To store network configurations

## **Computer Network LEC3 MCQ**

**Which of the following is NOT a type of cable used as a physical transmission medium?**

- A) Twisted Pair
- B) Coaxial
- C) Fiber Optic
- D) Wireless

**What does UTP stand for in networking?**

- A) Unshielded Twisted Pair
- B) Unprotected Twisted Pair
- C) Universal Twisted Pair
- D) Unidirectional Twisted Pair

**What is the primary advantage of using fiber optic cables over copper cables?**

- A) Lower cost
- B) Higher bandwidth and speed
- C) Easier installation
- D) More flexible

**Which of the following cables is typically used for Ethernet connections?**

- A) Coaxial
- B) Twisted Pair
- C) Fiber Optic
- D) All of the above

**What type of cable is characterized by having a central conductor surrounded by insulation and a metallic shield?**

- A) Twisted Pair
- B) Coaxial
- C) Fiber Optic
- D) UTP

**Which of the following is a characteristic of STP cables?**

- A) They are unshielded.
- B) They have shielding to reduce interference.
- C) They are only used for short distances.
- D) They are made of glass fibers.

**What is the purpose of a crossover cable?**

- A) To connect different types of networks
- B) To connect similar devices directly
- C) To increase the speed of data transmission
- D) To provide power to devices

## **Computer Network LEC3 MCQ**



**Which type of cable is most commonly used in residential networking?**

- A) Coaxial
- B) Fiber Optic
- C) Twisted Pair
- D) STP

**What is the main disadvantage of using twisted pair cables?**

- A) They are expensive.
- B) They are susceptible to electromagnetic interference.
- C) They have low bandwidth.
- D) They are difficult to install.

**What is the primary use of coaxial cables?**

- A) Telephone lines
- B) Internet connections and cable television
- C) Power transmission
- D) Data storage

**Which type of twisted pair cable is more effective at reducing electromagnetic interference?**

- A) UTP
- B) STP
- C) Coaxial
- D) Fiber Optic

**Which of the following is a disadvantage of fiber optic cables?**

- A) High bandwidth
- B) Susceptibility to interference
- C) Higher installation costs
- D) Lightweight

**What type of cable is typically used for connecting a computer to a switch in a local area network (LAN)?**

- A) Coaxial
- B) Fiber Optic
- C) Straight Through Twisted Pair
- D) Crossover Twisted Pair

**Which type of cable is best suited for high-speed internet connections?**

- A) Twisted Pair
- B) Coaxial
- C) Fiber Optic
- D) None

## **Computer Network LEC3 MCQ**

**What is the main reason for twisting the pairs of wires in twisted pair cables?**

- A) To increase the cable's strength
- B) To reduce electromagnetic interference
- C) To make the cable more flexible
- D) To improve the aesthetic appearance