**What kind of access method is CSMA/CD?**

Answer: **option a contention**

**Explanation for correct answer:**

Contention-based media access refers to a method of transferring data over a network in which computers "contend for" or share media. When more than one system discovers a free network and tries to communicate, a data collision occurs, and the systems must retransmit. Because computers compete for the right to transmit data into the network media, CSMA/CD is known as a contention mechanism. For Ethernet networks, CSMA/CD is the standard access mechanism.

**Explanation for incorrect answer**

The administrator can assign a priority to requests for media access using **demand priority.** When there is a tie for media access, the highest-priority connection wins, making the demand priority approach ideal for time-sensitive applications. Demand priority networks necessitate the employment of a specialised network device to govern access. As a result, demand priority installation is more costly than alternatives like CSMA/CD.

In computer networking, carrier-sense multiple access with **collision avoidance** (CSMA/CA) is a network multiple access approach in which nodes use carrier sensing but only begin transmission after the channel is sensed to be "idle."

Collisions are possible in both CSMA/CD and CSMA/CA. As the number of hosts in the network grows, the likelihood of collisions grows as well. When using**token passing**, a host must hold the token, which is an empty packet, while transmitting data. The token is cycling  the network at high speed.

The second most prevalent media access technique is tocken ring, which is specified in IEEE 802.5. However, due to Ethernet networking's dominance, tocken ring is a distant second.