The main function of the control plane is packet forwarding, which is to determine the paths a packet takes from its source to its destination. A control plane is responsible for executing routing protocols, responding to attached links that go up or down, communicating with remote controllers, and performing management functions.

5,00 Puan

A	True

B	False

A TCP socket is fully identified by the source IP address, the source port, the destination address, and the destination port. This happens as TCP establishes a bi-directional full-duplex session between the sender and the receiver.

5,00 Puan

A	True

B	False

When an OSPF route sends its link state information, it is sent only to those nodes directly attached neighbors.

5,00 Puan

A	True

B	False

The MAC address of the destination host and the port number of the socket in the destination process are used by a process running on one host to identify a process running on another host.

5,00 Puan

A	True

B	False

TCP creates a reliable data transfer service on top of IP's unreliable besteffort service. TCP's reliable data transfer service ensures that the data stream that a process reads out of its TCP receive buffer is uncorrupted, without gaps, without duplication, and in sequence; that is, the byte stream is exactly the same byte stream that was sent by the end system on the other side of the connection.

5,00 Puan

A	True

B	False

The communication layer is responsible for the communication between the SDN controller and those controlled network devices, via a protocol such as OpenFlow. Through this layer, an SDN controller controls the operation of a remote SDN-enabled switch, host, or other devices, and a device communicates locally-observed events (e.g., a message indicating a link failure) to the controller.

5,00 Puan

A	True

B	False

The HOL blocking problem is a large file in the webpage (i.e. video clip) will take a long time to pass through the bottleneck link such that it blocks other small objects behind it. HTTP/2 solves this problem by breaking each message into small frames, and interleave the request and response messages on the same TCO connection.

5,00 Puan

A	True

B	False

A subnet is a portion of a larger network; a subnet contains a router; its boundaries are defined by the router and host interfaces.

5,00 Puan

A	True

B	False

Suppose two packets arrive to two different input ports of a router at exactly the same time. Also suppose there are no other packets anywhere in the router. Suppose the two packets are to be forwarded to two different output ports. It is possible to forward the two packets through the switch fabric at the same time when the fabric uses a shared bus

5,00 Puan

A	True

B	False

Consider an application that transmits data at a steady rate (for example, the sender generates an N-bit unit of data every k time units, where k is small and fixed). Also, when such an application starts, it will continue running for a relatively long period of time. Packet-switched network would be more appropriate for this application.

5,00 Puan

A	True

B	False

It is possible for an application to enjoy reliable data transfer even when the application runs over UDP.

5,00 Puan

A	True

B	False

The service model of the Internet's network layer is reliable service. With this service model, there is a guarantee that packets will be received in the order in which they were sent, a guarantee of their eventual delivery, a guarantee on the end-to-end delay, and a minimal bandwidth guarantee.

5,00 Puan

A	True

B	False

A plug-and-play or zeroconf protocol means that the protocol is able to automatically configure a host's network-related aspects in order to connect the host into a network.

5,00 Puan

A	True

B	False

Bu Soruyu Boş Bırak

In modern packet-switched networks, including the Internet, the source host segments long, application-layer messages (for example, an image or a music file) into smaller packets and sends the packets into the network. The receiver then reassembles the packets back into the original message. We refer to this process as *message segmentation*.

5,00 Puan

A	True

B	False

Network architecture refers to the organization of the communication process into layers. Application architecture, on the other hand, is designed by an application developer and dictates the broad structure of the application.

5,00 Puan

A	True

B	False

A simple design for DNS would have one DNS server that contains all the mappings. In this centralized design, clients simply direct all queries to the single DNS server, and the DNS server responds directly to the querying clients. A single DNS server can be "close to" all the querying clients.

5,00 Puan

A	True

B	False

In the context of a communication session between a pair of processes, the process that initiates the communication (that is, initially contacts the other process at the beginning of the session) is labeled as the server. The process that waits to be contacted to begin the session is the client.

5,00 Puan

A	True

B	False

Suppose that the UDP receiver computes the Internet checksum for the received UDP segment and finds that it matches the value carried in the checksum field. The receiver can be absolutely certain that no bit errors have occurred.

5,00 Puan

A	True

B	False

A router uses longest prefix matching to determine which link interface a packet will be forwarded to if the packet's destination address matches two or more entries in the forwarding table. That is, the packet will be forwarded to the link interface that has the longest prefix match with the packet's destination.

5,00 Puan

A	True

B	False

The job of gathering data chunks at the source host from different sockets, encapsulating each data chunk with header information (that will later be used in demultiplexing) to create segments, and passing the segments to the network layer is called *multiplexing.*

5,00 Puan

A	True

B	False