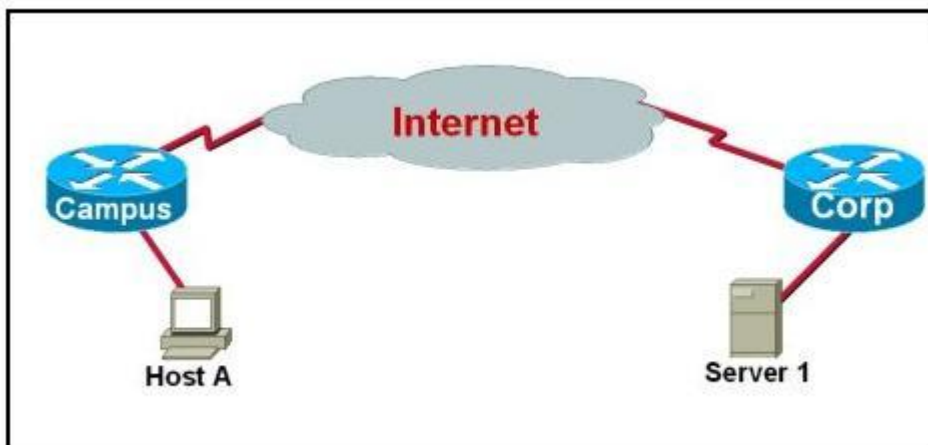


1. Which is an important characteristic of UDP?
 - acknowledgement of data delivery
 - minimal delays in data delivery**
 - high reliability of data delivery
 - same order data delivery
2. Which three features allow TCP to reliably and accurately track the transmission of data from source to destination? (Choose three.)
 - flow control**
 - numbering and sequencing**
 - session establishment**
 - urgent pointer
 - best effort delivery
 - connectionless services
3. During a TCP communication session, if the packets arrive to the destination out of order, what will happen to the original message?
 - The packets will not be delivered.
 - The packets will be retransmitted from the source.**
 - The packets will be delivered and reassembled at the destination.
 - The packets will be delivered and not reassembled at the destination.
4. Why are port numbers included in the TCP header of a segment?
 - to enable a receiving host to forward the data to the appropriate application**
 - to determine which Layer 3 protocol should be used to encapsulate the data
 - to identify which switch ports should receive or forward the segment
 - to indicate the correct router interface that should be used to forward a segment
 - to allow the receiving host to assemble the packet in the proper order
- 5.



Refer to the exhibit. Host A is using FTP to download a large file from Server 1. During the download process, Server 1 does not receive an acknowledgment from Host A for several bytes of transferred data. What action will Server 1 take as a result?

- create a Layer 1 jam signal
- reach a timeout and resend the data that needs to be acknowledged**
- send a RESET bit to the host
- change the window size in the Layer 4 header

6.

Bit 0	Bit 15	Bit 16	Bit 31
Source Port	13357	Destination Port	23
Sequence Number	43693		
Acknowledgement Number	8732		
Header Length	Reserved	Code Bits	Window 12000
Checksum	---		Urgent ---

Based on the transport layer header shown in the diagram, which of the following statements describe the established session? (Choose two.)

This is a UDP header.

This contains a Telnet request.

This is a TCP header.

This contains a TFTP data transfer.

The return packet from this remote host will have an Acknowledgement Number of 43693.

7. What are two features of the User Datagram Protocol (UDP)? (Choose two.)

flow control

low overhead

connectionless

connection-oriented

sequence and acknowledgements

8. After a web browser makes a request to a web server that is listening to the standard port, what will be the source port number in the TCP header of the response from the server?

13

53

80

1024

1728

9. Which event occurs during the transport layer three-way handshake?

The two applications exchange data.

TCP initializes the sequence numbers for the sessions.

UDP establishes the maximum number of bytes to be sent.

The server acknowledges the bytes of data received from the client.

10. Which information is found in both the TCP and UDP header information?

sequencing

flow control

acknowledgments

source and destination port

11. Which OSI model layer is responsible for regulating the flow of information from source to destination, reliably and accurately?

application

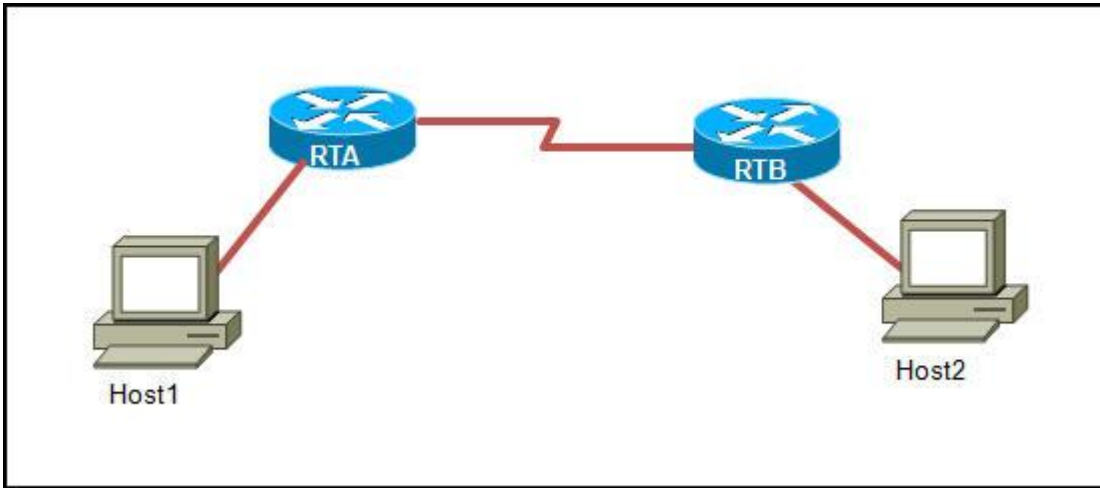
presentation

session

transport

network

12.



Refer to the exhibit. Host1 is in the process of setting up a TCP session with Host2. Host1 has sent a SYN message to begin session establishment. What happens next?

- Host1 sends a segment with the ACK flag = 0, SYN flag = 0 to Host2.
- Host1 sends a segment with the ACK flag = 1, SYN flag = 0 to Host2.
- Host1 sends a segment with the ACK flag = 1, SYN flag = 1 to Host2.
- Host2 sends a segment with the ACK flag = 0, SYN flag = 1 to Host1.
- Host2 sends a segment with the ACK flag = 1, SYN flag = 0 to Host1.

Host2 sends a segment with the ACK flag = 1, SYN flag = 1 to Host1.

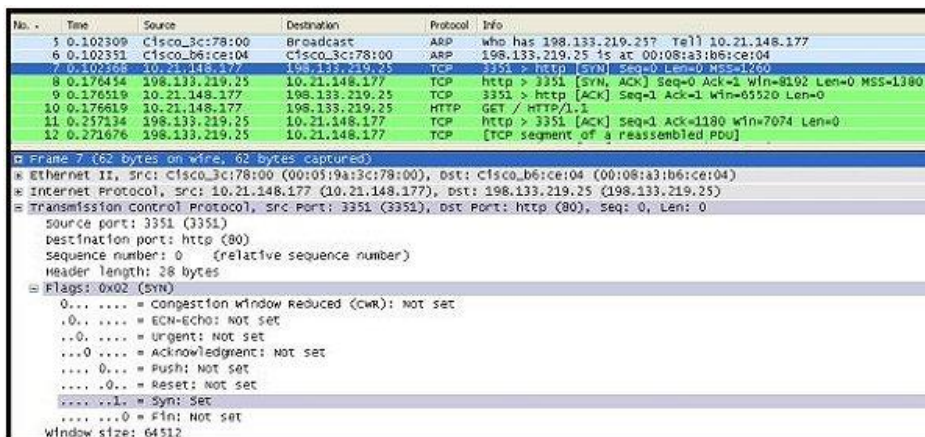
13. Which transport layer protocol provides low overhead and would be used for applications which do not require reliable data delivery?

- TCP
- IP
- UDP**
- HTTP
- DNS

14. What mechanism is used by TCP to provide flow control as segments travel from source to destination?

- sequence numbers
- session establishment
- window size**
- acknowledgments

15.



Refer to the exhibit. In line 7 of this Wireshark capture, what TCP operation is being performed?

- session establishment**
- segment retransmit
- data transfer
- session disconnect

16. With TCP/IP data encapsulation, which range of port numbers identifies all well-known applications?
 0 to 255
 256 to 1022
0 to 1023
 1024 to 2047
 49153 to 65535
17. Why is flow control used for TCP data transfer?
 to synchronize equipment speed for sent data
 to synchronize and order sequence numbers so data is sent in complete numerical order
to prevent the receiver from being overwhelmed by incoming data
 to synchronize window size on the server
 to simplify data transfer to multiple hosts
- 18.

```
C:\> netstat -n

Active Connections

Proto Local Address          Foreign Address        State
TCP   192.168.1.101:1031     64.100.173.42:443     ESTABLISHED
TCP   192.168.1.101:1037     192.135.250.10:110    TIME_WAIT
TCP   192.168.1.101:1042     128.107.229.50:80     ESTABLISHED
```

Refer to the exhibit. What two pieces of information can be determined from the output that is shown?
 (Choose two.)

The local host is using multiple client sessions.

The local host is using web sessions to a remote server.

The local host is listening for TCP connections using public addresses.

The local host is using well-known port numbers to identify the source ports.

The local host is performing the three-way handshake with 192.168.1.101:1037.

19. What is dynamically selected by the source host when sending data?

destination logical address

source physical address

default gateway address

source port

20. Which two options represent Layer 4 addressing? (Choose two.)

identifies the destination network

identifies source and destination hosts

identifies the communicating applications

identifies multiple conversations between the hosts

identifies the devices communicating over the local media