The transport layer handles multiplexing and demultiplexing through what type of device? **1 / 1 point**

- ○ Hubs
- ○ Switches
- ○ Routers
- ◉ Ports

✓ **Correct**

2. Which field in a Transmission Control Protocol (TCP) header is chosen from ephemeral ports? **1 / 1 point**

- ◉ Source port
- ○ Acknowledgement number
- ○ Destination port
- ○ Sequence number

✓ **Correct**

3. A Transmission Control Protocol (TCP) connection is established and two devices ensure that they're speaking the same protocol. What has occurred? **1 / 1 point**

- ○ Two-way handshake
- ◉ Three-way handshake
- ○ Handshake
- ○ Four-way handshake

✓ **Correct**

4. A Transmission Control Protocol (TCP) connection is in working order and both sides can send each other data. What is the TCP socket state? **1 / 1 point**

- ○ SYN_RECEIVED
- ◉ ESTABLISHED
- ○ LISTEN
- ○ SYN_SENT

✓ **Correct**

5. If the checksum doesn't compute for a packet sent at the Internet Protocol (IP) level, what will happen to the data? **1 / 1 point**

- ○ The data will be sent back to the sending node with an error.
- ◉ The data will be discarded
- ○ The data will be resent
- ○ It will be sent, but may be out of order.

✓ **Correct**

6. The OSI network model has _____ layers. **1 / 1 point**

- ○ six
- ◉ seven
- ○ eight
- ○ five

✓ **Correct**

7. You are sending a very small amount of information that you need the listening **1 / 1 point**

program to respond to immediately. Which Transmission Control Protocol (TCP) flag will be used?

- ○ RST
- ○ URG
- ◉ PSH
- ○ ACK

✓ **Correct**

8. HTTP is an example of a(n) _____ layer protocol. **1 / 1 point**

- ○ data-link
- ◉ application
- ○ transport
- ○ network

✓ **Correct**

9. What port does the File Transfer Protocol (FTP) typically listen on? **1 / 1 point**

- ○ "25"
- ◉ "21"
- ○ "80"
- ○ "443"

✓ **Correct**

10. A communication between two devices is over the maximum limit of an ethernet frame size. The Transmission Control Protocol (TCP) splits up the data into **1 / 1 point**

segments. Which field in the header helps keep track of the many segments?

- (●) Sequence number
- ( ) Acknowledgement number
- ( ) Urgent pointer
- ( ) Checksum

Correct