

A: send ACK 1-3 B: send ACK 3 C: send ACK 4 D: send ACK 4-6 E: send ACK 6 F: send ACK 7 Correct Answers: C
Explanation: TCP is known as a reliable service. Reliable data delivery ensures the integrity of a stream of data sent from one machine to the other through a fully functional data link. It guarantees that the data won't be duplicated or lost. This is achieved through something called positive acknowledgment with retransmission, a technique that requires a receiving machine to communicate with the transmitting source by sending an acknowledgment message back to the sender when it receives data. The sender documents each segment it sends and waits for this acknowledgment before sending the next segment. When it sends a segment, the transmitting machine starts a timer and retransmits if it expires before an acknowledgment is returned from the receiving end. In this case, 3 segments were received, so the receiver sends back an ACK value of 4 as it is expecting the 4th segment next.