**6. What is the role of the Pairwise Master Key (PMK) in the 4-way handshake?**

* The Pairwise Master Key (PMK) is a secret key shared between the client and the access point.
* In the 4-way handshake, the PMK is used to create new temporary keys for secure communication.
* It helps both sides prove that they know the same secret without actually sending the PMK over the air.
* The PMK is used to generate the Pairwise Transient Key (PTK), which is then used to encrypt the data.
* This process ensures that the connection is secure and that no attacker can guess the key easily.