**Theory:-**

Creating an ad-hoc network, also known as a peer-to-peer network, allows devices to connect directly to each other without the need for a central wireless access point.

Sure, let's simplify the concept of "Creating an Ad hoc Network":

**1. Ad hoc Network:**

- An "Ad hoc Network" is like a temporary connection between devices.

- It's not a permanent setup but something created on the spot for a specific need.

**2. Creating:**

- "Creating" here means making or setting up.

- So, we're talking about making a temporary connection between devices.

**3. Putting it Together:**

- "Creating an Ad hoc Network" is like making a quick and temporary network between your devices when you need them to talk to each other directly, without needing a central router or internet connection.

In simpler terms, it's like making a short-term connection between your devices when you want them to share information directly without going through the usual internet or Wi-Fi setup.

Imagine it as a direct link between your devices for a specific task.

**Practical 6: Creating an Ad hoc Network.**

1.Click on Network Devices → Click on Wireless Devices → Take 2 WRT300N wireless Routers (WRT300N Wireless Router0, WRT300N Wireless Router1)

2.Connection: -

Click on connection🡪 choose copper cross-over wire.

Connect Wireless Router0 Ethernet 1 → Wireless Router1 Ethernet1

3.Click on Wireless Router0🡪 GUI 🡪 Click on Wireless🡪

Network Name (SSID): CS

4. Click on Wireless Router0 → GUI 🡪Click on Wireless security→

Security Mode: WPA2 Personal

Passphrase: ciscorouter1

click on Save settings

5. Click on Wireless Router0 → GUI 🡪click on Administration.

Remote Access: Remote Management: Enabled (Click on Enabled.)

click on Save settings.

6. Similarly do same thing on Wireless Router1.

Click on Wireless Router1🡪GUI🡪Wireless → Basic Wireless settings.

Network Name (SSID): IT

7. Click on Wireless Router1🡪 GUI 🡪Click on Wireless security→

Security Mode: WPA2 personal

Passpharse: ciscorouter2

Click on Save Settings.

8. Click on Wireless Router1🡪 GUI 🡪Click on Administration.

Remote Access: Remote Management: Enabled (Click on Enabled.)

click on Save settings.

9. Check both wireless routers connected with each other or not by dropping PDU.

10. Click m End devices → Take 5 PC-PT

(PC-PT) PC0, PC1, PC2, PC3, PC4.

Connect machines (PC's) with wireless routers.

11. Click on PC-PT PC0🡪 power off 🡪remove wired component & attach wireless component🡪 power on button.

Similarly, repeat this step for rest 4 machines🡪PC1, PC2, PC3, PC4.

Now all PC’s have wireless devices.

11. PC0🡪 Desktop → PC wireless 🡪 Click on connect 🡪 Click on Refresh

get 2 wireless network Name: CS,IT

Click on CS: Preshared key🡪 ciscorouter1🡪click on connect.

12. PC1→ Desktop 🡪PC wireless 🡪 Click on Connect 🡪 Click on Refresh.

Click on IT: Preshared key🡪 ciscorouter2🡪click on connect.

13. PC2→ Desktop 🡪PC wireless 🡪 Click on Connect 🡪 Click on Refresh.

Click on CS: Preshared key🡪 ciscorouter1🡪click on connect.

14. PC3→ Desktop 🡪PC wireless 🡪 Click on Connect 🡪 Click on Refresh.

Click on CS: Preshared key🡪 ciscorouter1🡪click on connect.

15. PC4→ Desktop 🡪PC wireless 🡪 Click on Connect 🡪 Click on Refresh.

Click on IT: Preshared key🡪 ciscorouter2🡪click on connect.

16. Wireless Router0🡪 Lable🡪 CS

Wireless Router1🡪 Lable🡪 IT

17. Drop PDU. Check interconnectivity & Connectivity between routers.