**Theory:-**

Configuring basic Access Point (AP) settings involves setting up the essential parameters to enable wireless communication in a network.

Let's break down the idea of "Configuring Basic AP Settings":

**1. Configuring:**

- "Configuring" means setting up or adjusting things to make them work the way you want.

**2. Basic AP Settings:**

- "AP" stands for Access Point. It's like a hub that allows devices to connect to a network, usually Wi-Fi.

- "Basic settings" are the fundamental options you can adjust.

**3. Putting it Together:**

- "Configuring Basic AP Settings" is like setting up the fundamental options on a Wi-Fi hub (Access Point) to make it work the way you need it to.

In simpler terms, it's about adjusting the basic options on your Wi-Fi hub so that devices can connect to the internet or a network smoothly.

It's like choosing the essential settings to make your Wi-Fi work correctly.

**Practical 07: - Configuring Basic Ap Settings.**

1.Click on Network Devices 🡪click on wireless Devices 🡪Take 2 Accesspoint-PT.

(Accesspoint0, Accesspoint1)

2. Double click on Accesspoint0🡪 config🡪port 1

Click on the checkbox.

SSTD: CS (because I need to define 2 network)

Authentication: WPA2-PSK

psk pass phrase: ciscopacket1

3. Double click on Accesspoint1→ config🡪port 1

Click on the checkbox.

SSTD: IT (because I need to define 2 network)

Authentication: WPA2-PSK

psk pass phrase: ciscopacket2

4. Click on End Devices 🡪Take 4 PC-PT'S i.e. PC0, PC1, PC2, PC3

5. Click on PC0🡪 Desktop 🡪IP configuration🡪Static

IP address: 192.168.1.2

Subnet Mask: 255.255.255.0 (Automatically generated)

Default Gateway: 192.168.1.1

6. Click on PC1🡪 Desktop 🡪IP configuration🡪Static

IP address: 192.168.1.3

Subnet Mask: 255.255.255.0 (Automatically generated)

Default Gateway: 192.168.1.1

7. Click on PC2🡪 Desktop 🡪IP configuration🡪Static

IP address: 171.16.10.2

Subnet Mask: 255.255.0.0 (Automatically generated)

Default Gateway: 171.16.10.1

8. Click on PC3🡪 Desktop 🡪IP configuration🡪Static

IP address: 171.16.10.3

Subnet Mask: 255.255.0.0 (Automatically generated)

Default Gateway: 171.16.10.1

9. All the PC's has the wired connection. So, Convert it into wireless connection.

Click PC0🡪 physical 🡪power off→remove wired component with wireless component 🡪power on.

10. Do same step 9. for PC1, PC2, PC3

11. Accesspoint-PT0 → Labled🡪 Accesspoint-PT CS

Accesspoint - PT1🡪 Labled🡪 Accesspoint-PT IT

PC-PT PC0🡪 Labled 🡪PC-PT CS-1

PC-PT PC1🡪 Labled 🡪PC-PT CS-2

PC-PT PC2🡪 Labled 🡪PC-PT IT-1

PC-PT PC3🡪 Labled 🡪PC-PT IT-2

12. Click on CS-1🡪 config🡪 Wireless0🡪SSID: CS

Authentication: WPA2-PSK

psk Pass phrase: ciscopacket1

13. Click on CS-2🡪 config🡪 Wireless0🡪SSID: CS

Authentication: WPA2-PSK

psk Pass phrase: ciscopacket1

14. Click on IT-1🡪 config🡪 Wireless0🡪SSID: IT

Authentication: WPA2-PSK

psk Pass phrase: ciscopacket2

15. Click on IT-2🡪 config🡪 Wireless0🡪SSID: IT

Authentication: WPA2-PSK

psk Pass phrase: ciscopacket2

16. Click on Miscellaneous🡪 Take two 1841 Routers (Router0, Router 1)

17. Connect 1841 Router 0 to 1841 Router1 serially.

connection → select serial DTE

Router0 Serial 0/0/0 to Router1 Serial 0/0/0

18. Click on Router0🡪 config🡪 serial 0/0/0

Click on the checkbox.

Clock Rate: 64000

IP Address: 20.0.0.1

Subnet Mask: 255.0.0.0 (Automatically generated)

19. Click on Router1🡪 config🡪 serial 0/0/0

Click on the checkbox.

Clock Rate: 64000

IP Address: 20.0.0.2

Subnet Mask: 255.0.0.0 (Automatically generated)

20. Connect Router & Accesspoint.

Connection🡪choose copper cross-over

Router0 FastEthernet 0/0 to Accesspoint0 (CS) port0

21. Click on Router0🡪 config → Fast Ethernet 0/0

Click on the checkbox.

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0 (Automatically generated)

22. Connection🡪choose copper cross-over

Router1 FastEthernet 0/0 to Accesspoint1 (IT) port0

23. Click on Router1🡪 config → Fast Ethernet 0/0

Click on the checkbox.

IP Address: 171.16.10.1

Subnet Mask: 255.255.0.0 (Automatically generated)

24. Click on Router0🡪 config🡪 RIP🡪 CLI

# version 2 →enter.

25. Router0 → Config🡪 RIP →

Network: 20.0.0.0 🡪Add

: 192.168.1.0 Add.

26. CS-1 (PC0)→ Desktop → IP Configuration🡪Static

IP Address: 192.168.1.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

27. CS-2 (PC1)→ Desktop → IP Configuration🡪Static

IP Address: 192.168.1.4

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

28. IT-1 (PC2)→ Desktop → IP Configuration🡪Static

IP Address: 171.16.10.2

Subnet Mask: 255.255.255.0

Default Gateway: 171.16.10.1

29. IT-2 (PC3)→ Desktop → IP Configuration🡪Static

IP Address: 171.16.10.3

Subnet Mask: 255.255.255.0

Default Gateway: 171.16.10.1

30. Click on Router1🡪 config🡪 RIP🡪 CLI

# version 2 →enter.

31. Router1 → Config🡪 RIP →

Network: 171.16.10.0🡪Add

: 20.0.0.0 🡪Add

32.Drop PDU