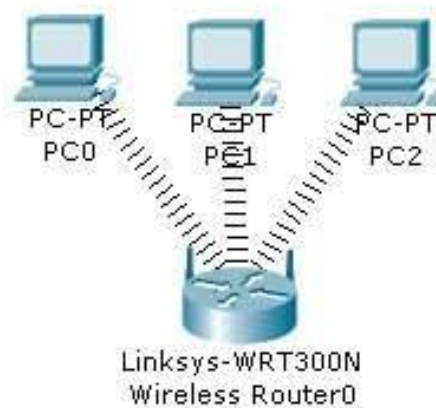# Practical-8

AIM:-b) Configuration of Wireless LAN using CISCO Packet Tracer.

Design a topology with three PCs connected from Linksys Wireless routers.

Perform following configuration:-

- Configure Static IP on PC and Wireless Router
- Set SSID to MotherNetwork
- Set IP address of router to 192.168.0.1, PC0 to 192.168.0.2, PC1 to 192.168.0.3 and PC2 to 192.168.0.4.
- Secure your network by configuring WAP key on Router
- Connect PC by using WAP key

To complete these tasks follow these step by step instructions:-

Step1:- Click on wireless router,

- Select Administration tab from top Menu, set username and password to admin and click on Save Setting.

- Next click on wireless tab and set default SSID to MotherNetwork.
- Now Select wireless security and change Security Mode to WEP


- Set Key1 to 0123456789

- Again go in the end of page and Click on Save Setting
- Now we have completed all given task on Wireless router. Now configure the static IP on all three PC's

- Double click on pc select Desktop tab click on IP configuration select Static IP and set IP as given below

PC	IP	Subnet Mask	Default Gateway
PC0	192.168.0.2	255.255.255.0	192.168.0.1
PC1	192.168.0.3	255.255.255.0	192.168.0.1
PC2	192.168.0.4	255.255.255.0	192.168.0.1

- Now it's time to connect PC's from Wireless router. To do so click PC select Desktop click on PC Wireless
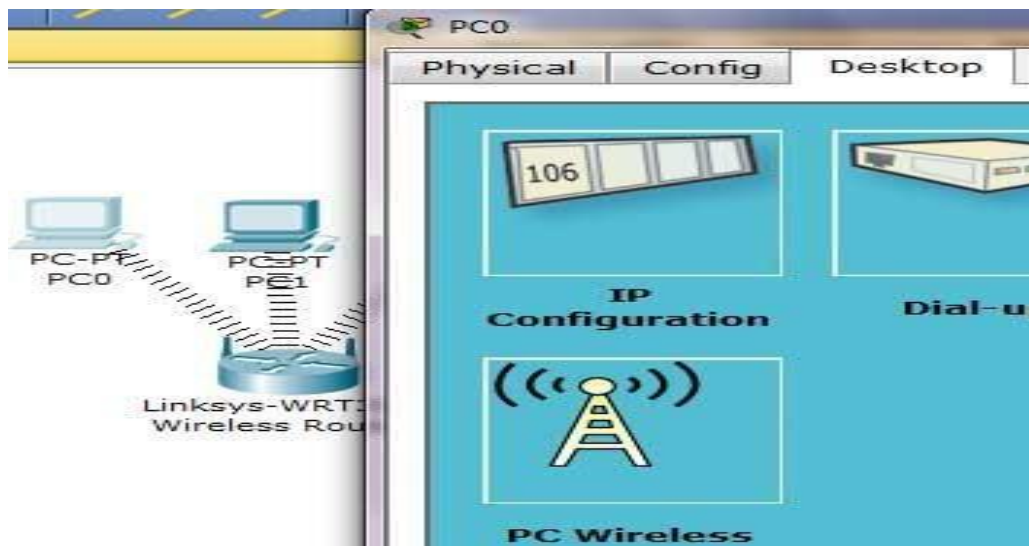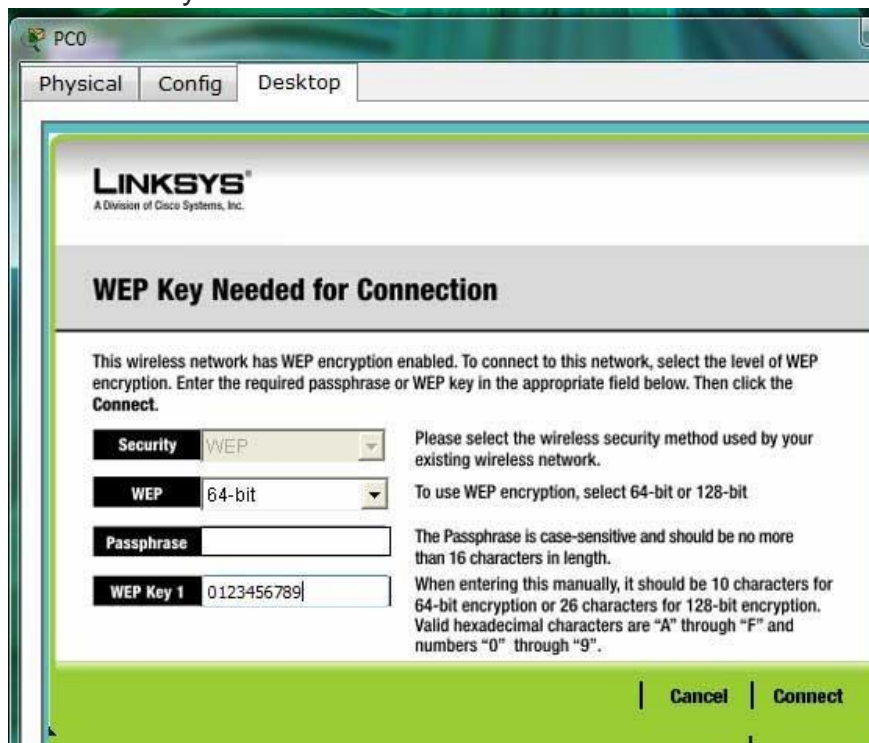

- Click on connect tab and click on Refresh button

As you can see in image that Wireless device is accessing MotherNetwork on CH 6 and signal strength is 100%. In left side you can see that WEP security is configured in network. Click on connect button to connect MotherNetwork

•   It will ask for WAP key insert 0123456789 and click connect

It will connect you with wireless router.

As you can see in image below that system is connected. And PCI card is active.

• Repeat same process on PC1 and PC2.

Student observation:

    c) **What is SSID of a wireless router?**

    d) **What is a security key in wireless router?**

    e) **Configure a simple Wireless LAN in your lab using a real access point and write down the configurations in your notebook.**

Answer:

c) **SSID** is the unique name of a wireless network that helps devices identify and connect to it.

d) A **security key** is a password required to connect to a wireless network, ensuring only authorized access.

e) Configuration Detials:

 SSID: "Lab_WLAN"

 Security Protocol: WPA2

Security Key: 1234

Router IP: 192.168.1.1

Result:

Thus, the virtual LAN was studied and verified successfully.