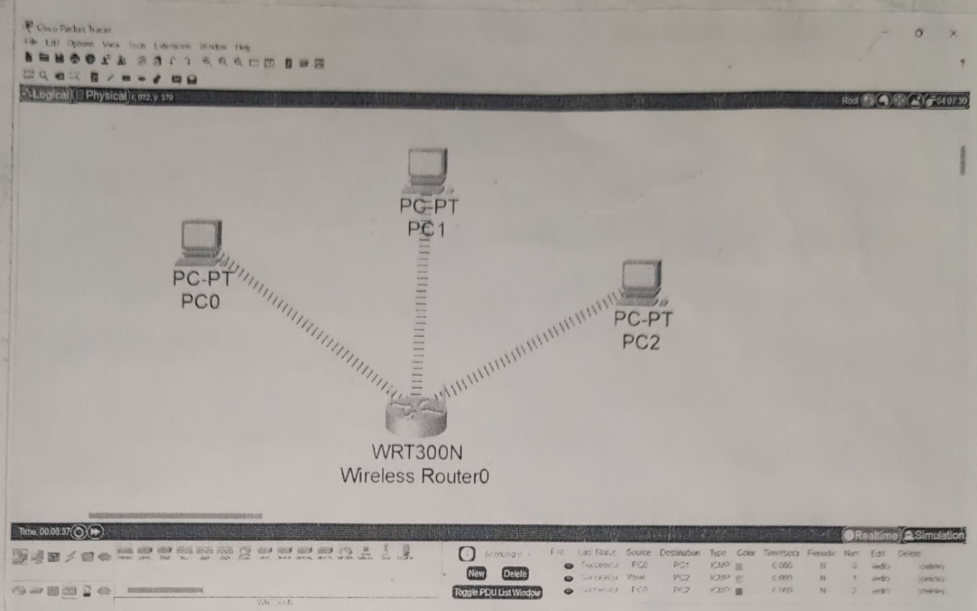# Pratical - 8b

AIM:-

b] Configuration of wireless LAN using CISCO Packet Tracer.

Perform following configuration:-

• Configure static IP on PC and wireless router.

• Set SSID to Mother Network.

• 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 to Router.

• connect PC by using WAP key.

To keep complete these follow these step by step instruction:-

Instructions :-

Step 1 :- click on wireless router.

• Select administration tab from top menu, Set username and password to, admin. and click on Save Settings.

• Now click on wireless tab and set default SSID to motherNetwork.

• Now select wireless security and change security to WEP.

• Set key 1 to 0123456789.

• Again go in the end of page and click on save settings.

• Now we have completed all given task on wireless router. Now configure the static IP on all above PC's.

• Double click on PC select Desktop tab click on IP configuration select static IP and set IP as given.

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	192.168.0.04	255.255.255.0	192.168.0.1

• Now its 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 Refresh button.

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

• It will connect wireless network.

• Repeat same process on PC1 and PC2.

Student Observation:-

a) What is SSID of a wireless router?

The SSID (Service set identifier) is the name that identifies a wireless network. When you search for available WiFi networks on your device the list of network names displayed represents SSIDs of nearby wireless routers.

b) configure what is security key in a wireless network?

A security key is the password used to protect a wireless network, ensuring only authorised devices can connect. Common types include WPA 2 and WPA3.

c) configure a simple wireless LAN in your lab using lab using a real access point and write down configuration in your notebook.

1] Access the Router's interface.
  • connect your laptop on PC via ethernet
  • open a web browser and enter IP address (192.168.1.1).

2] configure the SSID.
  • set SSID (eg: "lab_WIFI").

3] choose a wireless channel.
  • set Auto or manual.

4] set security as open.
  • wireless open network (WPA2-PSK).
  • create a password. ("12345678").

7) Assign DHCP server that automatically connect to wireless network.

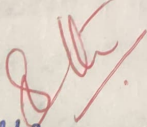6) Save the settings and Reboot the router on access point if neccessary.

Configuration :-

   SSID : Lab_Wifi

   Channel : Auto

   Security : WPA2-PSK

   Security key : Lab 12345.

   DHCP Range : 192.168.1.10 - 192.168.1.100.

Result :-

   Thus wireless LAN configuration is configured and executed.