EXPNO:10B

DATE:-
4/10/24

Practical-10B

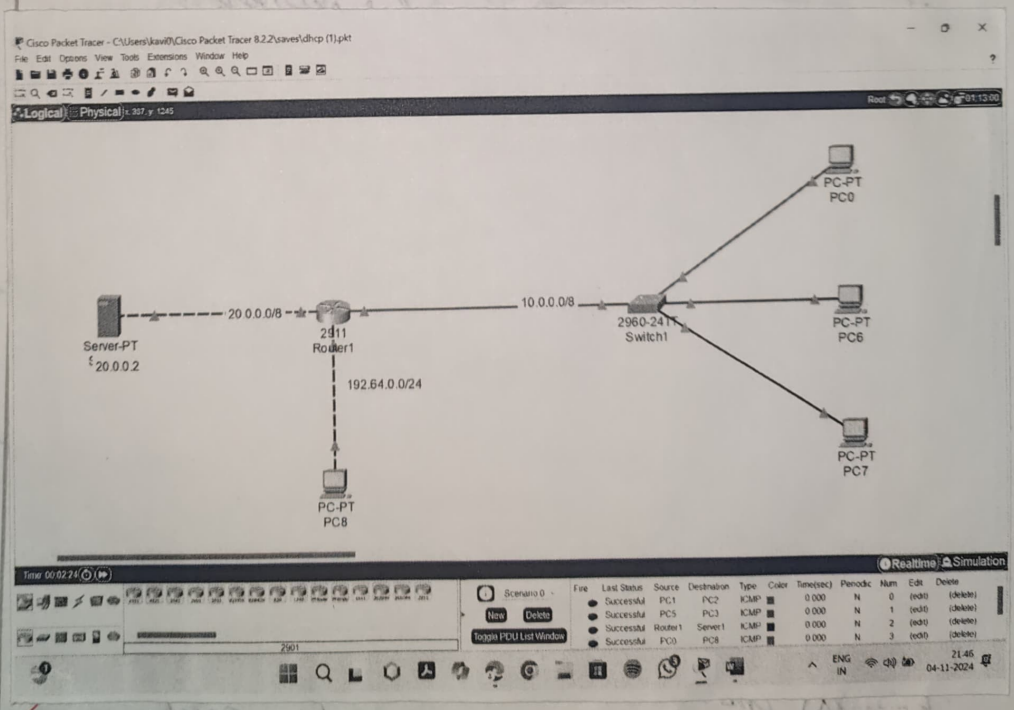
AIM:-

b) Design and configure an internetwork using wireless router, DHCP server and internet cloud.

Addressing Table:-

Device	Interface	IP Address	Subnet Mask	Default Gateway
PC	EthernetD	DHCP		192.168.0.1
wireless Router	LAN	192.168.0.1	255.255.255.0	
wireless Router	Internet	DHCP		
cisco.com Server	EthernetD	208.67.220.220	255.255.255.0	
Laptop	wireless0	DHCP		

DHCP Server:-



Objectives:-

- Part 1: Build a simple Network in the Logical Topology workspace
- Part 2: Configure the Network Devices
- Part 3: Test connectivity Between Network Devices
- Part 4: Save the file and close Packet Tracer.

Part 1: Build a simple Network in the Logical Topology workspace.

Step 1: Launch Packet Tracer

Step 2: Build the topology

a] Add Network devices to the workspace

b] change display names of the Network devices

c] Add the Physical cabling between devices on the workspace

Part 2: Configure the Network Devices

Step 1: Configure the wireless Network.

a] create the wireless Network on wireless router.

b] click on the save settings tab.

Step 2: configure the Laptop.

a] configure the Laptop to access wireless Network.

Step 3: configure the PC

a] Configure the PC for the wired Network.

Step 4: configure the Internet cloud

a] Install Network modules if necessary

b] Identify the from and To Ports.

c] Identify the type of Provider.

Step 5: configure the cisco.com server

a] configure the cisco.com server as a DHCP server

b] configure the cisco.com server as a DNS server to provide domains name to IPV4 address resolution

c] configure the cisco.com server the Global settings

d] configure the cisco.com server Fast Ethernet 0 interface settings

Part 3: verify connectivity:-

Step 1: Refresh the IPV4 settings on PC.

a] verify that the PC is receiving IPV4 configuring information from DHCP

b] Test the connectivity to the cisco.com from the PC.

Student observation:-

1] write down the key features of configuring wireless router and DHCP server.

• wireless router: set SSID, enable security (WPA2/WPA3), select channel and configure MAC.

• DHCP server: Define IP range, lease time, gateway, DNS and assign static IPs for critical devices.

2] what is the significance of DHCP server in internetworking.

DHCP automates IP assignment, prevent conflicts and simplifies network setup especially in large network.

Result:-

Thus internetworking using wireless router, DHCP server is executed successfully.