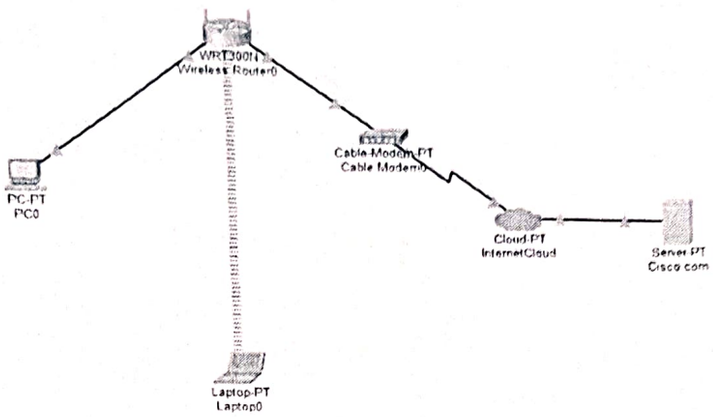
ExpNo: 10b

Design of configure Internetwork.

AIM:

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

10)b)



Addressing Table

Device	Interface	IP Address	subnetMask	default / gateway
PC	ethernet0	DHCP		192.168.0.1
wireless router	LAN	192.168.0.1	255.255.255.0	
wireless router	Internet	DHCP		
cisco.com server	ethernet	208.67.220.220	255.255.255.0	

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:

Step 1: Launch Packet Tracer

Step 2: Building the Topology

a) Add network devices to the workspace

b) change display name of the Network devices.

c) Add the physical cabling between devices on the workspace.

Part 2:

step 1: configure the wireless router.

a) create the wireless network on the wireless router.

b) click on the save settings tab.

step 2: configure the Laptop.

a) Configure the Laptop to access the wireless network.

step 3: configure the PC's

a) configure the PC for the wired network.

step 4: configure the Internet cloud

a) Install network modules if necessary

b) Identify the form and to ports

Steps: 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 domain name to IPV4 address resolution.

c) Configure the cisco.com server global setting.

d) Configure the cisco.com server FastEthernet 0 Interface setting.

Part 3: Verify connectivity

Step1: Refresh the IPV4 settings on the PC

a) Verify that the PC is receiving IPV4 configuration information from DHCP.

b) Test connectivity to the cisco.com server from PC.

Student Observation:-

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

wireless router configuration includes setting SSID, security key, ip range, and enabling DHCP for automatic IP assignment.

2. What is the significance of DHCP server in internetworking

DHCP server simplifies, internetworking automatically assigning IP addresses, reducing manual configuration errors.

3. Design and configure an internetwork in your lab using switch, router and ethernet cables.

A network was designed using a router switch and PC's connected via ethernet cables each device configured with unique ip addresses for communication

Result:

The internetwork was successfully designed and configured using a wireless router, DHCP server and internet cloud