I N D E X

NAME : A. Kavin   STD : III nd year   SEC. : CSE-B   ROLL NO. 220704122

S.No.	Date	Title	Page No.	Teacher's Sign/ Remarks
1.	16/7/24	Study of various Network commands used in Linux & windows		𝒮
2.	23/7/24	Study of Network cables		𝒮
3.	30/7/24	Experiments of CISCO PACKET TRACER (simulation tools		𝒮
4.	6/8/24	Setup and configure a LAN using a switch and Ethernet cable.		𝒮
5.	9/8/24	Experiments on packet capture tool: wireshark		𝒮
6.	16/8/24	Error correction at data link layer (Hamming code)		𝒮
7.	23/8/24	Flow control at data link layer (Sliding window protocol.		𝒮
8.	10/9/24	Stimulate virtual LAN Cisco Packet Tracer		𝒮
9.	30/9/24	Implementation of subnetting in CISCO Packet tracer		𝒮
10.	4/10/24	Internetworking using router DHCP server and internet cloud		𝒮
11.	8/10/24	Stimulate static routing protocol configuration using CISO Packet & RIP		𝒮
12.	15/10/24	echo client TCP/UDP sockets chart client server TCP/UDP		𝒮
13	22/10/24	write own Ping Problem		𝒮
14.	25/10/24	Raw, sockets to implement Packet Sniffing		𝒮
15.	29/10/24	webilizer tool		
		Completed		

Palaniappa

Exp. no.

Date : 4/10/24

Practical-10

Aim

a) Internetworking with routers in CISCO packet tracer simulator

Design and configure a simple internetwork using a router
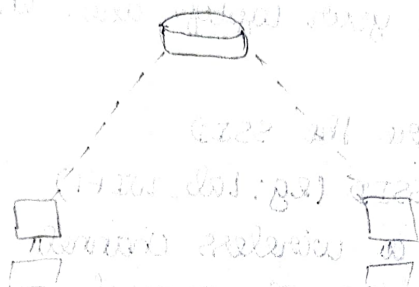
Procedure :

Step 1 (configuring Router 1):

Router 1 command line interface :

Router > enable

Router # config t

Enter configuration command. End with ctrl/z

Router (config)# interface FastEthernet 0/0

Router (config)# ip address 192.168.10.1 255.255.255

Router (config-if)# no shutdown

Step 2 :- configuring PCs

1. Assign every PC in network

2. Assign the default gateway of PC0 as 192.168

3. Assign the default gateway PC1 as 192.168.20.1

Step 3

1. Connect FastEthernet 0 port of PC0 with FastEthernet 0/0

2. connect FastEthernet 0/1 port of Router1

Result

Thus internetworking using wireless router DHCP server is executed successfully.

Exp.no : 10b

Date :

Aim:-

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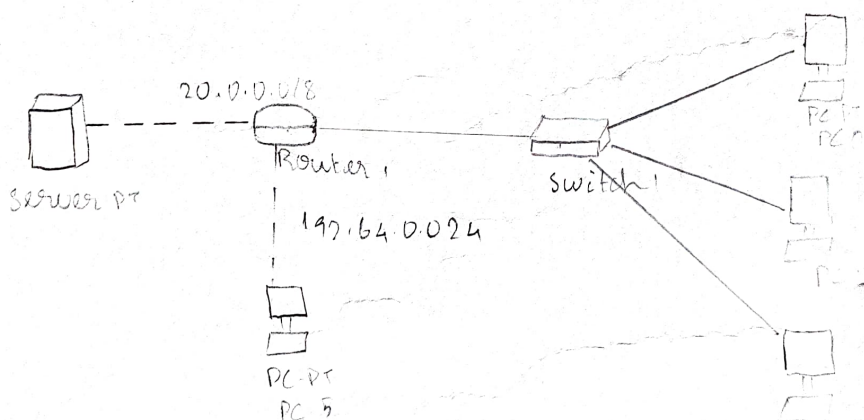
Addressing Table

Device	Interface	IP address	Subnet mask	Default Gateway
PC	Ethernet	DHCP		192.168.0
Wireless Router	LAN	192.168.0.1	255.255.255.0	
wireless router	Internet	DHCP		
Cisco.com server	Ethernet 0	208.67.220.220	255.255.255.0	
Laptop	wireless	DHCP		

DHCP server

20.0.0.0/8 Router

Server PT

197.64.0.0 24

PC·PT
PC 5

Switch

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

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

Result

The program is successfully executed
and output is verified.