Ex. No: 13

Practical-13

Internet working with Routers & Wireless Networks

Aim:

1) Design & configure a simple internetwork using a router and 2 PCs (wired)
2) Design & configure a internetwork using a wireless router, DHCP server & internet cloud.

Part A: Wired Internetwork with Router

Procedure:

1) Router Configuration (Router 1)

```
Router > enable
Router # config t
Router (config) # interface FastEthernet 0/0
Router (config-if) # ip address 192.168.10.1
                                255.255.255.0
Router (config-if) # no shutdown
Router (config-if) # interface FastEthernet 0/1
Router (config-if) # ip address 192.168.20.1
                                255.255.255.0
Router (config-if) # shutdown.
```

2) PC Configuration

PC0 : IP : 192.168.10.2 . Subnet: 255.255.255.0
Gateway: 192.168.10.1

PC1 : IP : 192.168.20.2, Subnet: 255.255.255.0,
Gateway : 192.168.20.1

3) Connect PCs to Router using Copper straight through cables.

PC0 → Fast Ethernet 0/0 of Router1
PC1 → Fast Ethernet 0/1 of Router1

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Result:
PC0 can successfully ping PC1 using a simple PDU Network Connectivity verified.