Part B: Wireless Network with DHCP & Internet

Procedure:

i) Build Topology: PC, wireless Router, Cable Modem, Intant Cloud, Cisco.com server.

2) Configure Wireless Router

LAN IP: 192.168.0.1, DHCP enabled, DNS: 208.67.220.20

SSID: Home Network

3) Configure Laptop

Replace Ethernet with wireless WPC300N module

Connect to SSID Home Network.

4) Configure PC

Enable DHCP to obtain IP automatically.

5) Configure Cisco.com server

DHCP Pool: 208.67.220.1 – 208.67.220.50

DNS: 208.67.220.220

IP: 208.67.220.220, Subnet: 255.255.255.0

6) Verify connectivity

Refresh IP on PC (IPConfig /release → ipconfig /renew)

Ping cisco.com → 4 replies received

Student observation questions:

i) key feature of configuring wireless Router & DHCP server:

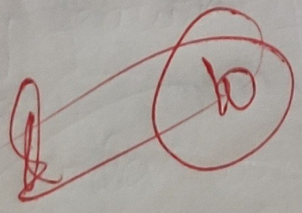
Provides wireless connectivity assigns IPs dynamically and manage network settings.

2) Significance of DHCP server in interworking

Automatically assigns IP addresses to devices, reducing manual configuration errors

3. Design a inter network using switch, router & ethernet cables.

Connect PCs to a switch, switch to router configure IPs and gateways for each device.



Result:

* PC successfully receives IP from DHCP and accesses cisco.com via wireless network.
* connectivity verified.