

## Practical-13

## Internet working with Routers &amp; 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 &gt; enable

Router # config t

Router (config) # interface Fast Ethernet 0/0

Router (config-if) # ip address 192.168.10.1  
255.255.255.0

Router (config-if) # no shutdown

Router (config-if) # interface Fast Ethernet 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 Router 1

PC1 → Fast Ethernet 0/1 of Router 1



1. Add topology, PC, router, switch, cable, router  
2. Add link, link can be added

3. Add link, link can be added  
4. Add link, link can be added

5. Add link, link can be added

6. Add link, link can be added

7. Add link, link can be added

8. Add link, link can be added

9. Add link, link can be added

10. Add link, link can be added

11. Add link, link can be added

12. Add link, link can be added

13. Add link, link can be added

14. Add link, link can be added

15. Add link, link can be added

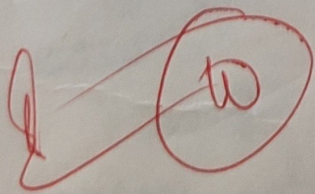
16. Add link, link can be added

17. Add link, link can be added

18. Add link, link can be added

19. Add link, link can be added

20. Add link, link can be added



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