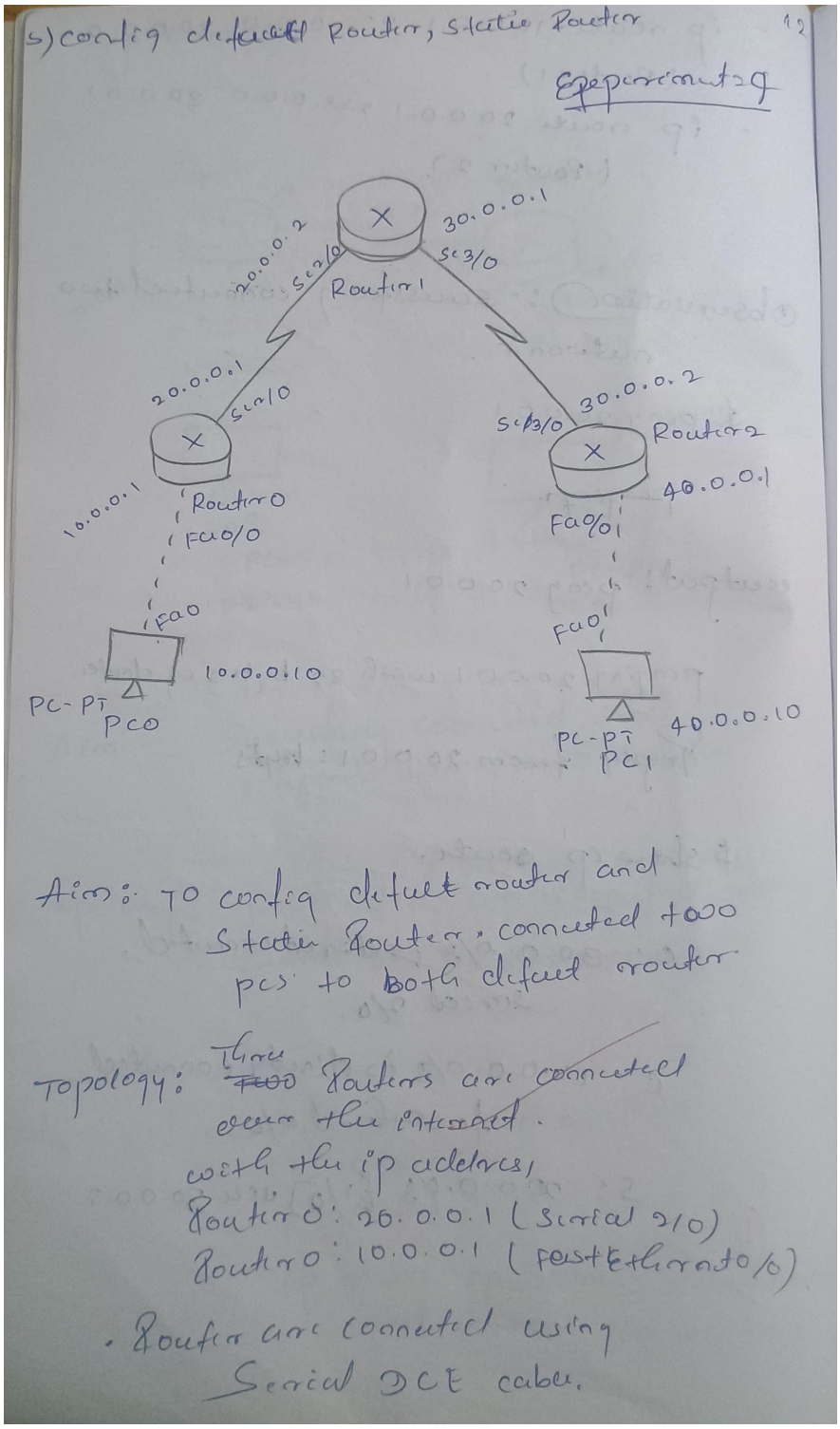
23|10|2024 Week-4(Experiment 3b)

Observation Book:



procedure:

-> select three Routers and set the ip address

Router0: 20.0.0.1 (Serial 2/0)
Router0: 10.0.0.1 (Fast Ethernet 0/0).

Router1: 20.0.0.2 (Serial 2/0)
Router1: 30.0.0.1 (Serial 3/0)

Router2: 30.0.0.2 (Serial 3/0)
Router2: 40.0.0.1 (Fast Ethernet 0/0).

-> select pcs and ~~set~~ config the ip address

PC0: 10.0.0.10 (ip address)
: 255.0.0.0 (subnet mask)
10.0.0.1 (Gateway).

PC1: 40.0.0.40 (ip address)
255.0.0.0 (subnet mask)
40.0.0.1 (Gateway).

-> Router0 and Router2 are connected to ~~two~~ PCs PC0 and PC1

* click on PC0 and set the ip address and set gateway address as Router0 ip address
∴ 10.0.0.1

* click on PC1 and set the gateway
40.0.0.1 (ip address of Router2).

-> for Router0 set the static Router
0.0.0.0/0 via 20.0.0.2

-> select the Router1 and set the static router of both router ip address

* Router1 to Router0
10.0.0.0 via 20.0.0.1

* Router1 to Router2
40.0.0.0 via 30.0.0.2

-> click on Router2 and set the static route from Router2 to Router1
0.0.0.0 via 30.0.0.1

Observation:

* To configure default router and static router's successfully connected using Serial DCE cables.
* packets are sended successfully from source to destination.

output :

PC0 : $ ping 40.0.0.10

pinging 40.0.0.10 with 32 bytes of data

Reply from 40.0.0.10 : bytes = 32
time = 2ms TTL = 125

Reply from 40.0.0.10 bytes = 32
time = 10ms TTL = 125

Reply from 40.0.0.10 bytes = 32
time = 18ms. TTL = 125

Reply from 40.0.0.10 bytes = 32
time = 2ms TTL = 125

packets : sent 4 ; Received = 4,
lost = 0 (0% loss).

Router0 :
$ show ip route.

C 10.0.0/8 is directly connected FastEthernet 0/0

C 20.0.0/8 is directly connected

S* 0.0.0.0/0 [1/0] via 20.0.0.2.

Router 1 $ show ip route

S: 10.0.0.0/8 [1/0] via 20.0.0.1

C: 20.0.0.0/8 is directly connected,
Serial 2/0

C: 30.0.0.0/8 is directly connected,
Serial 3/0

S: 40.0.0.0/8 [1/0] via 30.0.0.2.

Router 2:

$show ip route

C 30.0.0.0/8

C 30.0.0.0/8 is directly connected,
Serial 3/0

C: 40.0.0.0/8 is directly connected,
FastEthernet 0/0

S* 0.0.0.0/0 [1/0] via 30.0.0.1

Topology:

Output: