Program 4
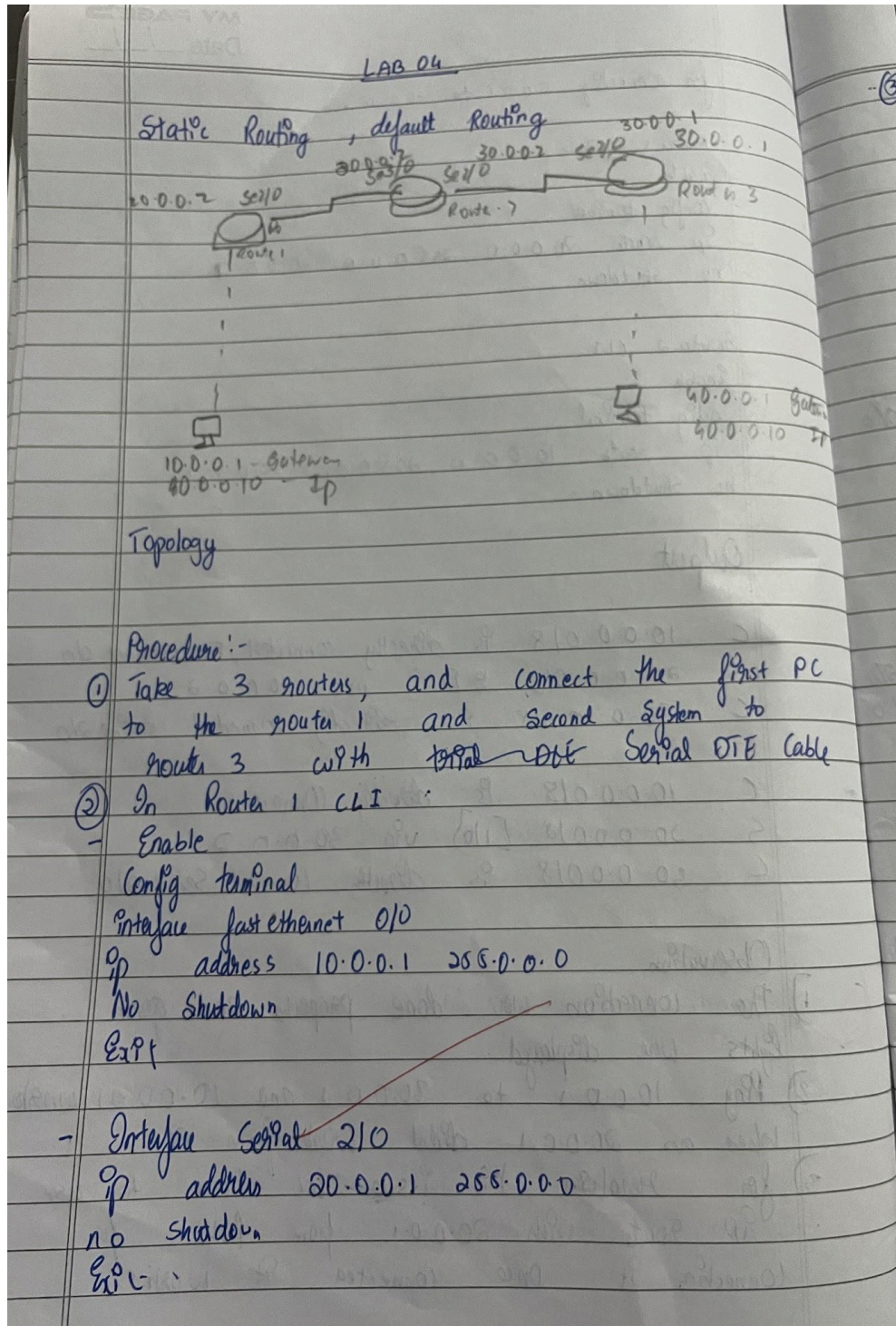
Aim: Configure default route, static route to the Router(Part 2).

Topology , Procedure and Observation:

LAB 04

Static Routing , default Routing

30·0·0·1
30·0·0·2 Se2/0   30.0.0.1
30·0·0·2 Se2/0
Se2/0
30·0·0·2 Se2/0   Roud n 3
20·0·0·2 Se2/0   Route · 7

Router 1

10·0·0·1 - Gatewa
40·0·0·10 · Ip

40·0·0·1 Gate
40·0·0·10 IP

Topology

Procedure:-

① Take 3 routers, and connect the first PC
to the router 1 and second System to
router 3 with ~~serial~~ DCE Serial DTE Cable

② In Router 1 CLI
- Enable
Config terminal
interface fast ethernet 0/0
Ip   address 10·0·0·1 255·0·0·0
No Shutdown
Exit

- Interface Serial 2/0
Ip address 20·0·0·1 255·0·0·0
no shutdown
Exit

③ In Router 3 CLI
Enable
Config terminal
Interface fast Ethernet 0/0
ip address 40.0.0.1 255.0.0.0
No Shutdown
exit

Interface Serial 2/0
ip address 20.0.0.21 255.0.0.0
No Shutdow·
Exit

⇒ In Router 2 CLI
Enable
Config terminal 2
Interface Serial 2/0
ip address 20.0.0.2 255.0.0.0
No Shutdown
Exit

Interface Serial 3/0
ip address 30.0.0.2 255.0.0.0
Exit.

④ Static Configuration fo

- Router 1
ip route 0.0.0.0 0.0.0.0 20.0.0.2

- Router 3
ip route 0.0.0.0 0.0.0.0 30.0.0.1

for   Router 2:

ip   route   10.0.0.0   255.0.0.0   20.0.0.1
ip   route   40.0.0.0   255.0.0.0   30.0.0.1

Observation

Router 1

C   10.0.0.0/8   is directly   connected   FastEthernet 0/0
C   20.0.0.0/8   is directly   connected, Serial 2/0
S *   0.0.0.0/0 [1/0]   via 20.0.0.2

Router 2

S . 10.0.0.0/8 [1/0]   via   20.0.0.2
C   20.0.0.0/8   is directly   connected   Serial 2/0
C   30.0.0.0/8   is directly   connected   Serial 3/0
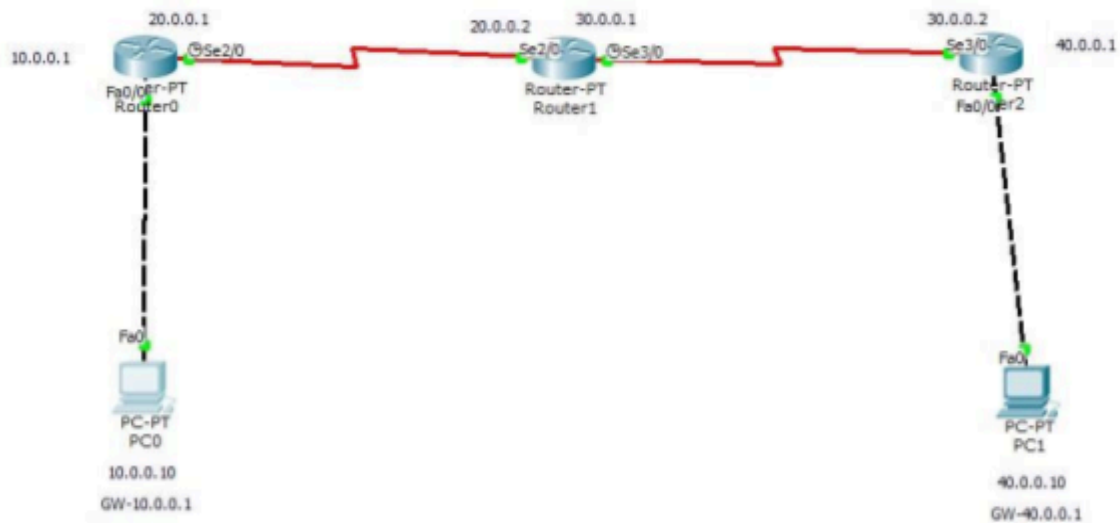S   40.0.0.0/8 [1/0]   via   30.0.0.2

Router 3

C   30.0.0.0/8   is directly connected Serial 2/0
C   40.0.0.0/8   is directly connected fast Ethernet0/0
S *   0.0.0.0/0 [1/0]   via   30.0.0.1

In PCR CLI

    ping   10.0.0.1

Reply   from   10.0.0.01   bytes 32   time-6 ms TTL=203
    Sucesful

Command Prompt

```
Pinging 40.0.0.10 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.10: bytes=32 time=7ms TTL=125
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125
Reply from 40.0.0.10: bytes=32 time=5ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 7ms, Average = 6ms

PC>ping 40.0.0.10

Pinging 40.0.0.10 with 32 bytes of data:

Reply from 40.0.0.10: bytes=32 time=8ms TTL=125
Reply from 40.0.0.10: bytes=32 time=7ms TTL=125
Reply from 40.0.0.10: bytes=32 time=9ms TTL=125
Reply from 40.0.0.10: bytes=32 time=6ms TTL=125

Ping statistics for 40.0.0.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 6ms, Maximum = 9ms, Average = 7ms

PC>
```