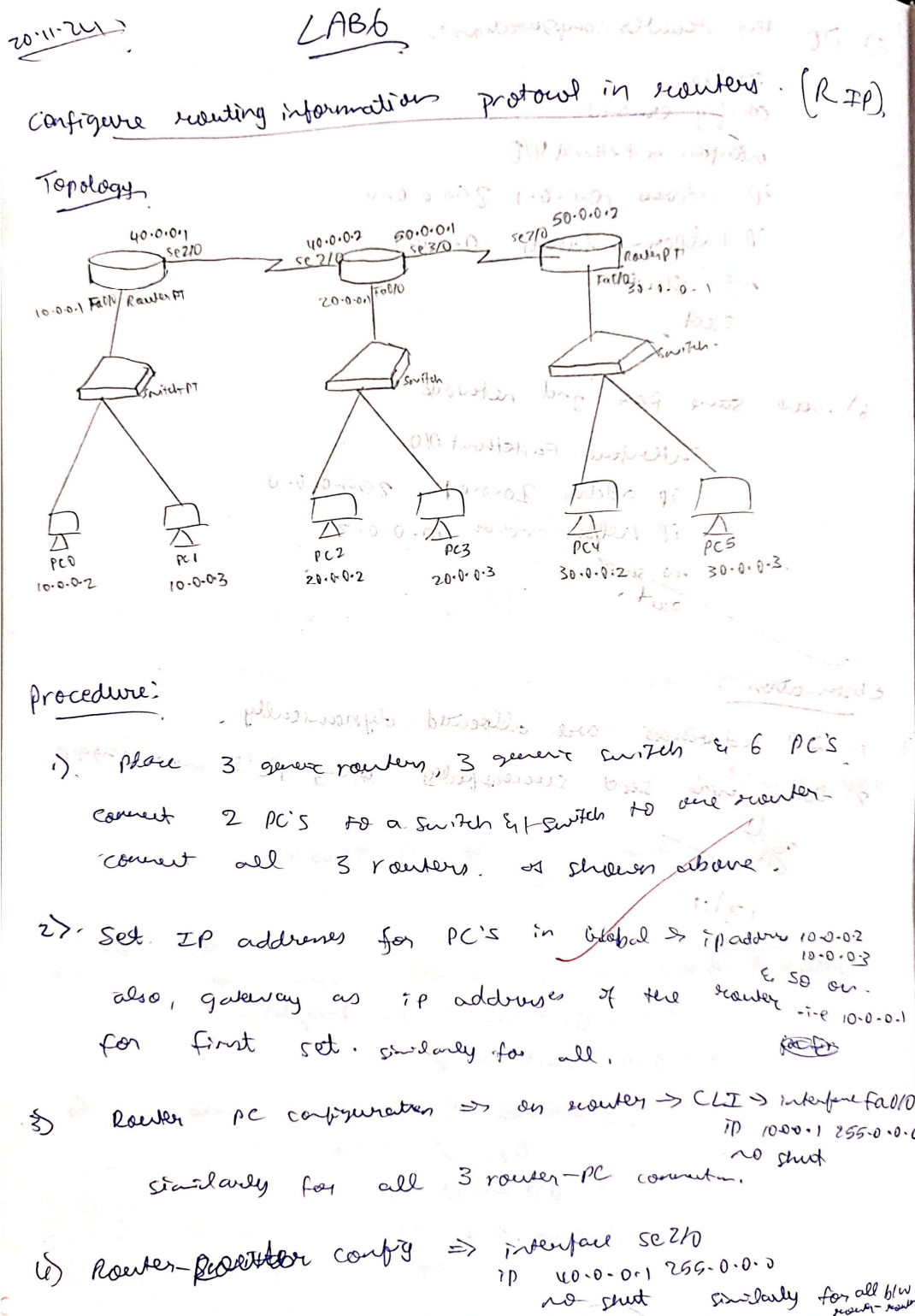## Program 6
Aim: Configure RIP routing Protocol in Routers .

Topology , Procedure and Observation:

20·11·24 :   LAB6

Configure routing information protocol in routers . (RIP)

Topology.

Procedure:

1). Place 3 generic routers, 3 generic switch & 6 PC's.
   connect 2 PC's to a switch & 1 switch to one router.
   connect all 3 routers. as shown above .

2). Set IP address for PC's in Global → ip address 10·0·0·2
   10·0·0·3
   also, gateway as ip address of the router & so on.
   for first set . similarly for all.   -i·e 10·0·0·1

3) Router PC configuration ⇒ on router → CLI → interface fa0/0
                                                   IP 10·0·0·1 255·0·0·0
                                                   no shut
   similarly for all 3 router-PC connection.

4) Router-Router config ⇒ interface se2/0
                           IP 40·0·0·1 255·0·0·0
                           no shut   similarly for all b/w
                                             router-router

25

5) Configure routing information Protocol to 3 routers
   in Router 0

   (Config)# router rip

   (config- router) # network 10.0.0.0

               # network 40.0.0.0

   Similarly for Router1 and Router 2.
                 ↓   ↓
              40.0.0.0   50.0.0.0
              50.0.0.0   30.0.0.0.
              20.0.0.0

Observation:

- Before rip, unable to ping → was getting Request Timed Out.
- After configuring routing information Protocol in routers, able to ping successfully.

Output:

*) PC> ping 30.0.0.3

   Pinging 30.0.0.3 with 32 bytes of data

   Reply from 30.0.0.3 : byte =32 time=2ms TTL= 126
       "————————"
       " ————————"
       "————————"

   Ping statistics for 30.0.0.3:
       Packets : Sent=4, Received =4, Lost=0 (0% loss).
       Approximate round trip times in milli seconds:
         Minimum=1ms, Maximum= 3ms, Avg=2ms.

*) #Show ip route → Router 3.

   R   10.0.0.0/8 [120/2] via 50.0.0.1 , 00:00:06 , serial2/0
   R   20.0.0.0/8 [120/1] via 50.0.0.1   00:00:06 , serial2/0.
   C   30.0.0.0/8 is directly connected, Fa0/0
   R   40.00.0/8 [120/1] via 50.0.0.1 , 00:00:00, Se2/0.
   C   50.00.0/8 is directly connected, Se2/0

Screen Shots: