EX - (16)
Date : 9/10/24

Routing Information Protocol.

AIM :

To simulate RIP using Cisco Packet Tracer.

PROCEDURE :

1) Create network using 3PCs & 4 routers as shown in image.

2) Assign IP address for the PCS & router ports.

PCO : IP - 10.1.1.1
Gateway - 10.1.1.2

PC1 : IP - 200.1.1.1
Gateway - 200.1.1.2

PC2 : IP - 222.2.2.2
Gateway - 222.2.2.12

Router 3 - gig 0|0 - 20.1.1.1
           0|1 - 192.168.1.1
           0|2 - 10.1.1.1

Router 2 - gig 0|0 - 20.1.1.2
           0|1 - 172.1.1.1
           0|2 - 200.1.1.2

Router 1 - gig o|o - 192. 168. 1. 3
           o|1 - 172.1.1.2
           o|2 - 217.1.1.1

Router 4 - gig o|o - 217.1.1.2
           o|1 - 222.2.2.12

3) Click on router 3
   → Click config → RIP
   → Enter Network 10.0.0.0 → Add
   → Enter Network 20.0.0.0 → Add
   → Enter Network 192.168.1.0 → Add
   Thus step is done in order to add the
neighbouring network address for router 3.

4) Do same for Router 2, 1, & 4.
   Router 2 → config → RIP
   → 20.0.0.0 - add
   → 172.1.0.0 - add
   → 200.1.1.0 - add

   Router 1 → config → RIP
   → 172.1.0.0 - add
   → 192.168.1.0 - add
   → 217.1.1.0 - add

   Router 4 → config → RIP
   → 217.1.1.0 - add
   → 222.2.2.0 - add.

5) Now to deeplay the routing table click on router (say router 1)
→ Then on CLI & type the command
#exit
exit
Show p route.

OUTPUT

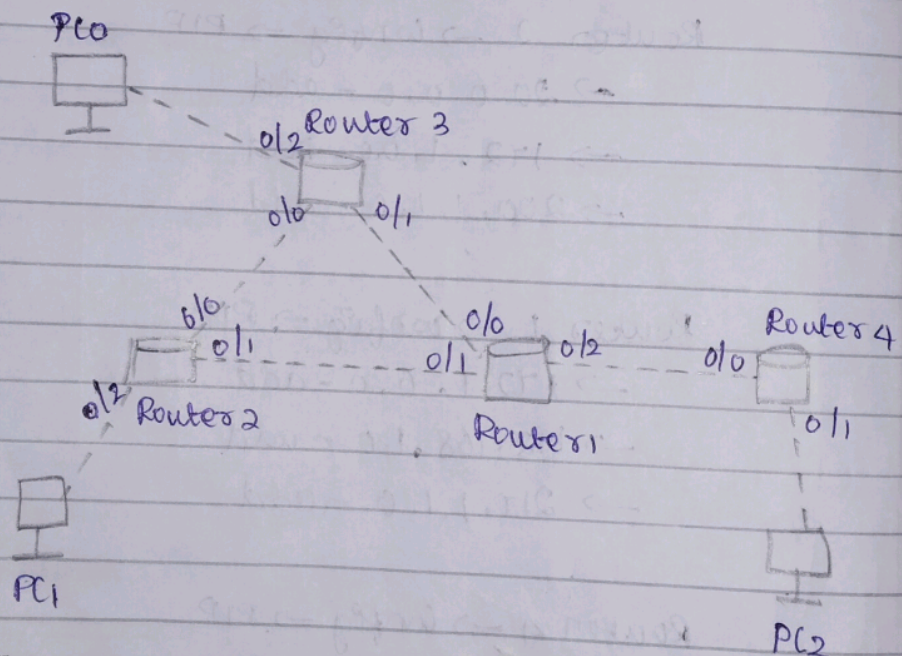R. 10.0.0.0/8 via 192.168.1.1 gig 0/0
R. 20.0.0.0/8 via 192.168.1.1 gig 0/0
0. 172.1.0.0/16 is variable connected
2 subnet 2 mask.
C. 172.1.0.0/16 is directly connected gig0/
L. 172.1.1.2/32 is directly connected gig0/1.

DIAGRAMATIC REPRESENTATION.

PC0

0/2 Router 3
0/0 0/1

6/0   0/0   Router 4
0/1 - - - - 0/1   0/2   0/0
0/2 Router 2   Router1   0/1

PC1   PC2

RESULT
Thus RIP is simulated using Cisco Packet tracer successfully.