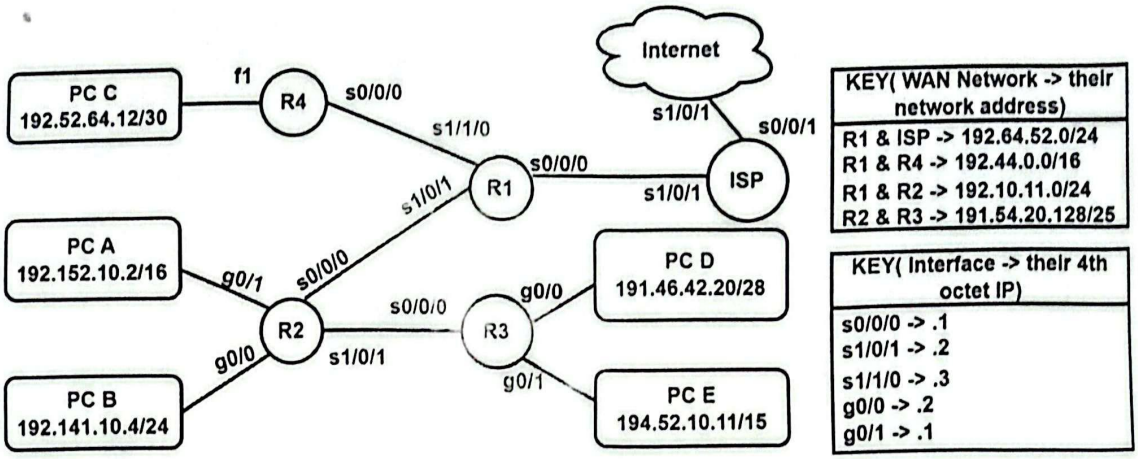
25-Summer-CSE421-1 Quiz 10-A Marks: 15 Time: 20 mins

Name: ID: Serial:



Given, the routers in the above topology runs by sharing their routing tables with their neighbours.

1. What algorithm is being used to calculate the routes dynamically? **[3]**

   ☐ RIP ☐ OSPF ☐ EIGRP ☐ None

2. Which of the following is true for the algorithm being used in the topology? **[2]**

   ☐ It's a decentralized algorithm ☐ It's a global algorithm

3. What method is the algorithm using to calculate the shortest paths? **[3]**

   ☐ Counting Hops ☐ Considers link cost

   ☐ Cost is always 0 ☐ None

4. During a cold start, how many networks will R3 know about without sharing any routing updates? **[2]**

   ☐ 1 ☐ 2 ☐ 3 ☐ 4

5. After how many 30 second cycles will R3 know about PC A? **[3]**

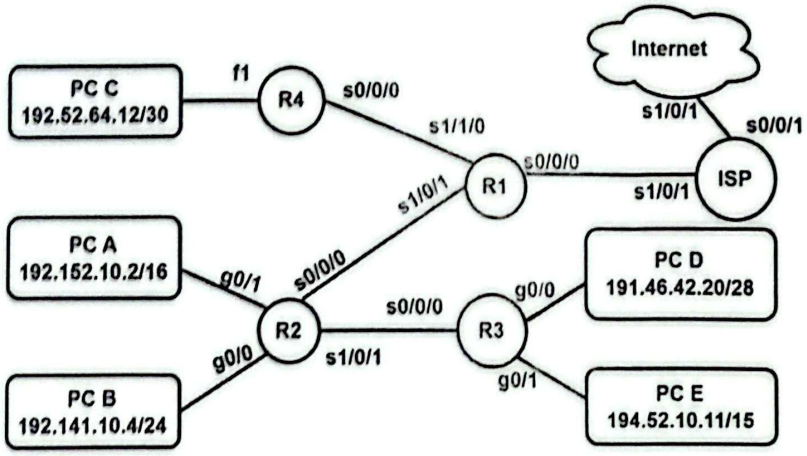
   ☐ 0 (0th sec) ☐ 1 (30th sec) ☐ 2 (60th sec) ☐ 3 (90th sec)

6. A computer cannot route packets. As a result, there's no need to send any routing table updates in those directions. We handle this by marking the outgoing interfaces as a "Passive Interface". Identify the passive interfaces for R1. **[2]**

   ☐ s0/0/0 ☐ s1/1/0 ☐ s1/0/1 ☐ None

25-Summer-CSE421-1 Quiz 10-B Marks: 15 Time: 20 mins

Name: ID: Serial:



KEY(WAN Network -> their network address)
R1 & ISP -> 192.64.52.0/24
R1 & R4 -> 192.44.0.0/16
R1 & R2 -> 192.10.11.0/24
R2 & R3 -> 191.54.20.128/25

KEY(Interface -> their 4th octet IP)
s0/0/0 -> .1
s1/0/1 -> .2
s1/1/0 -> .3
g0/0 -> .2
g0/1 -> .1

Given, the routers in the above topology runs by sharing their link information with every other router in the area.

1. What algorithm is being used to calculate the routes dynamically? **[3]**

   ☐ RIP ☐ OSPF ☐ EIGRP ☐ None

2. Which of the following is true for the algorithm being used in the topology? **[2]**

   ☐ It's a decentralized algorithm ☐ It's a global algorithm

3. What method is the algorithm using to calculate the shortest paths? **[3]**

   ☐ Counting Hops ☐ Considers link cost

   ☐ Cost is always 0 ☐ None

4. How do the selected algorithm in Q1 mark interfaces as passive? Meaning, how do they determine through which interfaces it will NOT send the LSP updates?. **[2]**

   ☐ By using LSP Packets

   ☐ By using Hello Packets

   ☐ By using DBD Packets

   ☐ None

5. When does this algorithm run the shortest path finding algorithm? **[3]**

   ☐ Every 30 seconds

   ☐ Once after all the databases sync LSPs

   ☐ By constantly flooding the LSPs

   ☐ None

6. Which of the following algorithm finds the shortest path faster?

   ☐ RIP ☐ OSPF ☐ EIGRP ☐ None ☐ RIP ☐ OSPF ☐ EIGRP ☐ None