**Computer Networks Quiz 4**

May 2021

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**SOLUTIONS: A D D B A**

\_\_\_\_\_ 1. Regarding routing algorithms, which of the following statements is most correct?

1. RIP is based on distance vector routing.
2. OSPF and IS-IS are based on distance vector routing.
3. BGP is based on distance vector routing.
4. Distance vector routing is based on Dijkstra’s shortest path algorithm.

\_\_\_\_\_ 2. Which of the following best describes link state routing?

1. Link state routing suffers from the “count to infinity” problem.
2. Link state routing is also known as “hot potato routing”.
3. Link state routing is also known as software defined networking (SDN).
4. It is possible to employ hierarchical link state routing within a large AS.

\_\_\_\_\_ 3. “Poisoned reverse” completely resolves which of the following problem?

1. Count to infinity.
2. Shortage of IPv4 addresses.
3. Head-of-line blocking.
4. None of the above.

\_\_\_\_\_ 4. Which statement about BGP is NOT correct?

1. BGP is the de facto routing protocol on the Internet’s backbone.
2. BGP always tries to find the shortest path between a pair of sender and receiver nodes.
3. A router may simultaneously run IGP, iBGP and eBGP protocols.
4. BGP routers exchange messages over TCP connections.

\_\_\_\_\_ 5. Which of the following statements is most correct about SDN and OpenFlow?

1. OpenFlow switches and the SDN controller exchange messages over TCP connections.
2. OpenFlow switches compute shortest paths locally, using Dijkstra’s shortest path algorithm.
3. OpenFlow switches compute shortest paths locally, using Bellman-Ford shortest path algorithm
4. OpenFlow is a protocol that operates between controllers of different SDN networks.