Started on	Tuesday, 27 August 2024, 9:02 AM
State	Finished
Completed on	Tuesday, 27 August 2024, 9:06 AM
Time taken	4 mins 7 secs
Marks	4.00/12.00
Grade	**3.33** out of 10.00 (**33**%)

Question 1

Incorrect

Mark 0.00 out of 2.00

S1: Distance vector routing is used by OSPF

S2: Link state routing is used by RIP

Select one or more:

- ☐ a. S2 is correct but S2 is correct
- ☑ b. Both statements are true ✗
- ☐ c. S1 is correct but S2 is incorrect
- ☐ d. Both statements are false

The correct answer is: Both statements are false

Question 2

Correct

Mark 2.00 out of 2.00

In link state routing, a link state announcement packet is prepared by the router based on

Select one or more:

- ☑ a. Local knowledge of the network ✔
- ☐ b. Network administrator preference
- ☐ c. Knowledge of the whole network
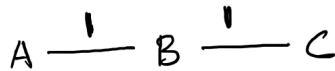- ☐ d. User preference

The correct answer is: Local knowledge of the network

Question 3

Incorrect

Mark 0.00 out of 2.00

Consider the network below with distance vector routing. When the A-B link weight changes from 1 to 70, how many message exchanges between B and C it will take for the routing table to stabilize at B?

Select one or more:
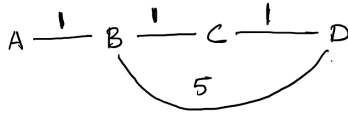
- ☐ a. 70
- ☐ b. 36-69
- ☐ c. 2-35
- ☑ d. 1 ✘

The correct answer is: 36-69

Consider the following network topology with distance vector routing:

If the A-B link goes down:

S1: Split horizon will address the count-to-infinity problem

S2: Split horizon with poison reverse will address the count-to-infinity problem

Select one or more:

- ☐ a. S1 is incorrect, S2 is correct
- ☐ b. S1 is correct, S2 is incorrect
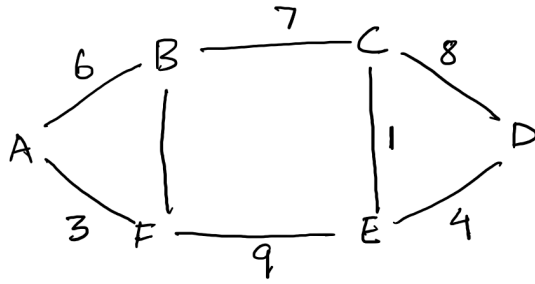- ☐ c. Both statements are true
- ☑ d. Both statements are false ✓

The correct answer is: Both statements are false

Question 5

Incorrect

Mark 0.00 out of 2.00

Consider the following network topology with shortest path routing:

How many links will not be utilized after the routing table stabilizes?
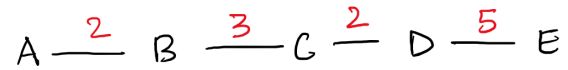
Select one or more:

☐ a. 4

☑ b. 3 ✗

☐ c. 1

☐ d. 2

The correct answer is: 2

What is the distance vector announced by B in the 2nd iteration for the following network topology?

$$A \xrightarrow{2} B \xrightarrow{3} C \xrightarrow{2} D \xrightarrow{5} E$$

Select one or more:

- ☐ a. (B,0)
- ☐ b. (A,2), (C,3)
- ☑ c. (A,2), (C,3), (D,5) ✗
- ☐ d. (B,0), (A,2), (C,3)

The correct answer is: (B,0), (A,2), (C,3)