Started on	Wednesday, 7 August 2024, 9:01 AM
State	Finished
Completed on	Wednesday, 7 August 2024, 9:07 AM
Time taken	5 mins 46 secs
Grade	**8.00** out of 10.00 (**80**%)

Question 1

Correct

Mark 2.00 out of 2.00

Which of the following is NOT a service provided by the Link Layer?

Select one or more:

☐ a. Framing

☑ b. Routing ✔

☐ c. Error detection

☐ d. Link access

The correct answer is: Routing

Question 2

Correct

Mark 2.00 out of 2.00

Consider the bit stuffing approach discussed in class, what bit sequence will the sender transmit for the data sequence **0111110101**?

Select one or more:

- ☐ a. 01111101001
- ☐ b. 01111110101
- ☐ c. 0111110101
- ☑ d. 01111100101 ✓

The correct answer is: 01111100101

Question 3

Incorrect

Mark 0.00 out of 2.00

Assuming odd parity is used for error detection, which of the following received sequences definitely has a bit error? (select all that apply)

Select one or more:

- ☐ a. 01101010
- ☐ b. 010001001
- ☑ c. 01110000 ✗
- ☐ d. 01010101

The correct answers are: 01101010, 01010101

Question 4

Correct

Mark 2.00 out of 2.00

Consider a 4-bit checksum, what will be the checksum bits for the data sequence 1110 0010 0101?

Select one or more:

☐ a. 1010

☐ b. 0111

☑ c. 0110 ✓

☐ d. 1011

The correct answer is: 0110

Question 5

Correct

Mark 2.00 out of 2.00

Consider a burst of 10 packets arriving at a router, what is the **average queuing delay** in milliseconds (ms)? Assume 1 packet is served in 10 ms. (enter only the number without units).

Answer: 45 ✓

The correct answer is: 45