Quiz on Moodle, Password: rsa

ABR: Consider a video player that uses the following bitrates

Low	1 Mbps
Med	2 Mbps
High	4 Mbps

Maximum buffer = 5 sec
Video chunk size = 2 seconds
Initial buffered video = 3 sec
Available bandwidth is as follows:

Time(s)	B/w(Mbps)
0-5	4
5-10	1
10-15	2

CBC: Consider a 3-bit cipher block chaining scheme that uses the following cipher:

Plaintext (3-bit)	Ciphertext (3-bit)
000	101
001	011
010	000
011	110
100	010
101	111
110	001
111	100

RSA: Consider Bob is using RSA. He advertises his public key to Alice

Bob ———————— Alice

K_B^- = $\qquad$ K_B^+

$(55, x)$ $\qquad$ $(55, 3)$

K_B^+ : Public Key

K_B^- : Private Key

Started on	Tuesday, 11 November 2025, 9:01 AM
State	Finished
Completed on	Tuesday, 11 November 2025, 9:07 AM
Time taken	6 mins 49 secs
Grade	**2.00** out of 12.00 (**17**%)

Question 1

Incorrect

Mark 0.00 out of 2.00

ABR: What is the buffer occupancy, right after t = 10s, if the player keeps requesting medium quality chunk.

Answer: 7 ✗

The correct answer is: 3

Question 2

Incorrect

Mark 0.00 out of 2.00

ABR: What is the buffer occupancy (in seconds) at t = 4s, assuming the player always requests high quality chunks.

Answer: 4 ✗

The correct answer is: 3

Question 3

Incorrect

Mark 0.00 out of 2.00

ABR: Assume the player selects a bitrate that is less than or equal to the average throughput observed over the past two chunks.
If only one chunk has been downloaded so far, it uses that chunk's throughput for estimation.
The player requests a medium-quality chunk at t = 0 seconds.
What bitrate will it select for the chunk requested at t = 5 seconds?

Answer: 2 ✗

The correct answer is: 4

Question 4

Correct

Mark 2.00 out of 2.00

CBC: Consider m(1) = 001 and c(0) = 010. What is the encoding for m(1)?

Answer: 110 ✔

The correct answer is: 110

Question 5

Incorrect

Mark 0.00 out of 2.00

RSA: What is the value of x?

Answer: 3 ✘

The correct answer is: 27

Question 6

Not answered

Marked out of 2.00

RSA: Suppose Alice wants to send 5 to Bob. What is the corresponding ciphertext?

Answer: ✘

The correct answer is: 15

◀ Quiz8

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