Computer networks

2015-CS-EQ-1

I) seq → m
seq of next segment → m+1
} false ✗

next segment seq → m + no. of bytes

II) $t_{retransmit} \geq RTT$ ✓
(Maybe not the equal to part but still true)

III) Adv. window does not change ✗
It changes which is why it is advertised

IV) $N_{not\ acked} \leq$ Adv window
When the adv. window size changes, the $N_{not\ ack}$ value could be more than Adv window. ✓

2012-EQ-4

AIMD ⇒ Do they mean congestion avoidance phase?

	new threshold
2	
4	
8	
9	= 5
10 ✗	= 10/2

2 → Window size starts from 1 MSS
4
5
6
7 → 10th transmission

CWS at the end of 10th transmission = 7+1 = 8 MSS ✗

2007-IT-1

(i) false
(ii) Probably false ✗
(iii) True. ✗ → false

True

2005-CS-EQ-1

TCP- packets can definitely take different routes based on traffic and congestion.
UDP- although I am not sure, UDP should also be able to take different routes.
Ex: Client in moving train.

So, I say TCP & UDP ✓

Read up on why you are correct.

2008-CS-EQ-2

Probably the connect() call ✓

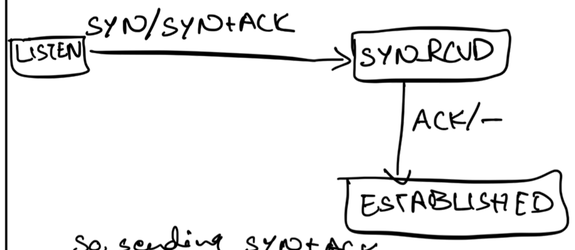
Read about the other sys calls.

2008-IT-EQ-8

S1: If SYN+ACK is lost, connection will not be established ✓

Why?

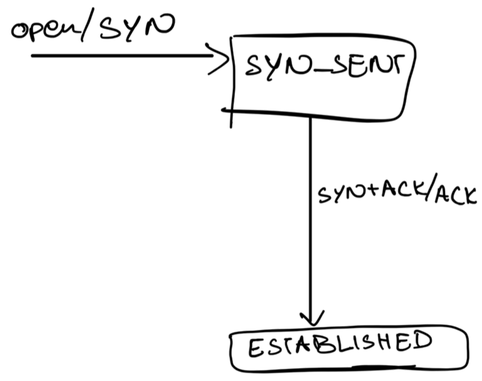
For server,



So, sending SYN+ACK is crucial

S2: Loss of ACK from client cannot establish the connection.
Server (as seen above) will def. not be in established state.

For client



Unsure

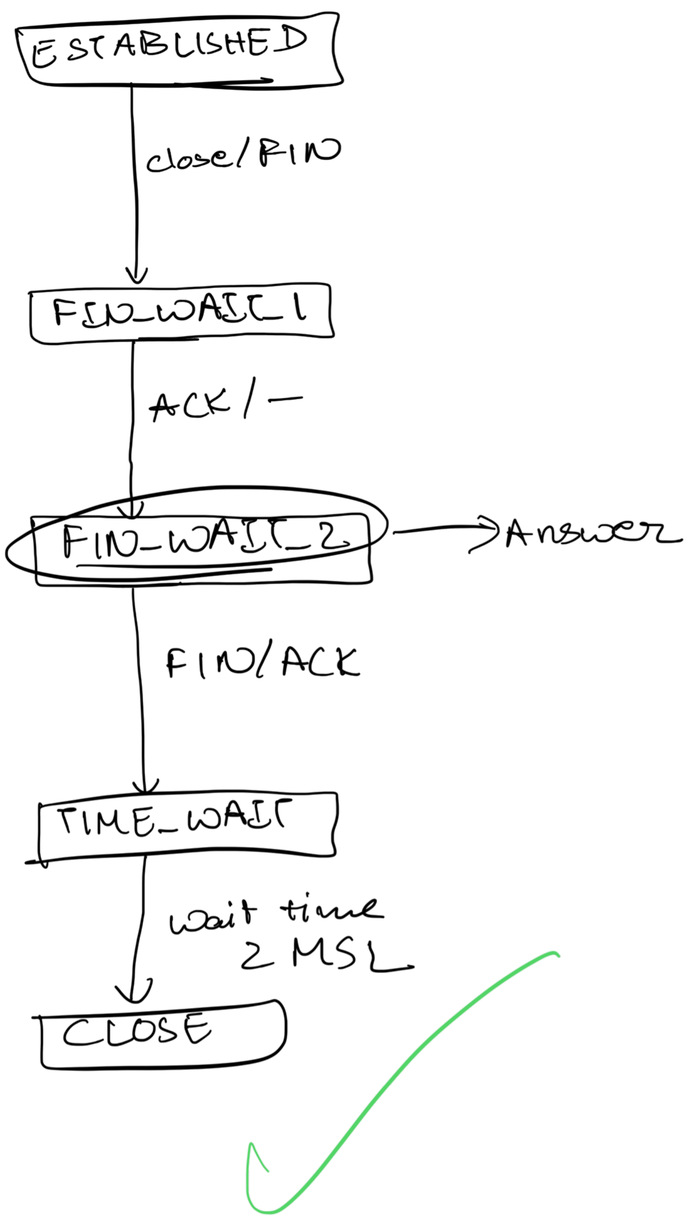
S3: Server has an SYN_SENT state. ✗

S4: Server states are as per diag. ✓

S1 & S4 def. true. ✗

Check why you're wrong.

2017-CS-EQ-1



✓