quiz on concurrency control 2

Due Apr 23 at 11:59pm   **Points** 100   **Questions** 10   **Available** after Apr 15 at 12am   **Time Limit** None
Allowed Attempts 2

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	5 minutes	84 out of 100

⚠ Answers will be shown after your last attempt

Score for this attempt: **84** out of 100
Submitted Apr 21 at 5:41pm
This attempt took 5 minutes.

Question 1	**10 / 10 pts**

If we ignore the B+ tree structure, just lock pages while traversing the tree, following 2PL, which node in the tree will be the bottleneck?

- ⦿ root
- ○ data record
- ○ data entry

Question 2
10 / 10 pts

In the simple tree locking algorithm, locking starts at which node and goes down?

root

Question 3
10 / 10 pts

Safe node means the node such that changes will not propagate down beyond this node.

○ True

◉ False

Question 4
10 / 10 pts

A node N can be locked by a transaction T in S or IS mode only if the parent node N is already locked by this transaction in either IS or IX mode

◉ True

○ False

Question 5
10 / 10 pts

unlocking starts from where?

○ root

○ random node

◉ bottom

Question 6

10 / 10 pts

If a transaction T starts to unlock any node, it cannot lock a node anymore.

◉ True

○ False

Question 7

10 / 10 pts

IS and IX are compatible but S and X are not.

◉ True

○ False

Question 8
10 / 10 pts

SIX and IX are not compatible but SIX and IS are.

- ◉ True
- ○ False

Question 9
4 / 10 pts

If the parent node of node N is already locked by transaction T in IX mode, then what lock can be granted for node N for this transaction?

Choose all the correct answers.

- ☑ IS
- ☐ X
- ☐ SIX
- ☐ S
- ☑ IX

Question 10
0 / 10 pts

If the parent node of node N is already locked by transaction T in IS mode, then what lock can be granted for node N for this transaction?

Choose all the correct answers.

- ☑ SIX
- ☐ X
- ☑ S
- ☑ IS
- ☑ IX

Quiz Score: **84** out of 100