Computer Science and Engineering
Course work portal
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DBMS Theory

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State	Finished
Completed on	Saturday, 10 April 2021, 7:42 PM
Time taken	7 mins 20 secs
Grade	**13.33** out of 14.00 (**95**%)

Question 1

Correct

Mark 2.00 out of 2.00

⚑ Flag question

Which of the following is/are true for Validation Based Protocol?

Select one or more:

☑ Validation Based Protocol is also known as Optimistic Concurrency Control ✔

☐ There are three timestamps (Start(Q), Validation(Q) and Finish(Q)) associated with each data item Q in Validation Based Protocol

☑ Serializability order of schedules generated by Validation Based Protocol is determined by the validation time ✔

☑ Validation Based Protocol generates cascadeless schedules ✔

Your answer is correct.

The correct answer is: Validation Based Protocol is also known as Optimistic Concurrency Control, Validation Based Protocol generates cascadeless schedules, Serializability order of schedules generated by Validation Based Protocol is determined by the validation time

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Question 2

Correct

Mark 2.00 out of 2.00

⚑ Flag question

Which of the following is/are true for transactions?

Select one or more:

☑ Consistency is primarily a responsibility of the users/programmers although database management systems provide some support ✔

☐ Isolation means all the transactions are executed serially

☑ Atomicity of transactions means either all the instructions in a transaction will get executed completely or none at all ✔

☑ Durability ensures that there are sufficient mechanisms to recover a database to a consistent state after a system crash ✔

Your answer is correct.

The correct answer is: Atomicity of transactions means either all the instructions in a transaction will get executed completely or none at all, Consistency is primarily a responsibility of the users/programmers although database management systems provide some support, Durability ensures that there are sufficient mechanisms to recover a database to a consistent state after a system crash

Question 3

Correct

Mark 2.00 out of 2.00

⚐ Flag question

Which of the following is/are true for schedules?

Select one or more:

☐ Any view serializable schedule is also conflict serializable

☐ A conflict serializable schedule can never be view serializable

☑ Any conflict serializable schedule is also view serializable ✔

☐ A view serializable schedule can never be conflict serializable

Your answer is correct.

The correct answer is: Any conflict serializable schedule is also view serializable

Question 4

Partially correct

Mark 1.33 out of 2.00

⚐ Flag question

Which of the following is/are true for Timestamp Based Protocol?

Select one or more:

☑ Timestamp Based Protocol generates schedules that are deadlock free ✔

☑ Timestamp Based Protocol with Thomas' Write rule can generate schedules that are view serializable but not conflict serializable ✔

☐ For conflict serializable schedules generated by Timestamp Based Protocol, the timestamps of transactions determine the serializability order

☐ Read Timestamp (R_Timestamp) of a data item Q is always the timestamp of the transaction that last read it successfully

Your answer is partially correct.

You have correctly selected 2.
The correct answer is: Timestamp Based Protocol with Thomas' Write rule can generate schedules that are view serializable but not conflict serializable, Timestamp Based Protocol generates schedules that are deadlock free, For conflict serializable schedules generated by Timestamp Based Protocol, the timestamps of transactions determine the serializability order

Question 5

Correct

Mark 2.00 out of 2.00

Which of the following is/are true for schedules?

Select one or more:

☐ A cascadeless schedule can never be recoverable

☐ Any recoverable schedule is also cascadeless

☐ A recoverable schedule is always deadlock free

☑ Any cascadeless schedule is also recoverable ✓

Your answer is correct.

The correct answer is: Any cascadeless schedule is also recoverable

Question 6

Correct

Mark 2.00 out of 2.00

Which of the following is/are true for locks?

Select one or more:

☐ Two transactions can simultaneously hold exclusive lock on the same data item

☑ Two transactions can simultaneously hold shared lock on the same data item ✓

☐ One transaction can hold shared lock on a data item while another transaction is still holding an exclusive lock on the same data item

☑ One transaction can initially hold shared lock on a data item and, if required, later escalate it to an exclusive lock ✓

Your answer is correct.

The correct answer is: Two transactions can simultaneously hold shared lock on the same data item, One transaction can initially hold shared lock on a data item and, if required, later escalate it to an exclusive lock

Question 7

Correct

Mark 2.00 out of 2.00

Which of the following is/are true for schedules?

Select one or more:

☐ Schedules generated by Two Phase Locking are always deadlock free

☑ Schedules generated by Two Phase Locking are always view serializable ✓

☑ Schedules generated by Two Phase Locking are always conflict serializable ✓

☐ Schedules generated by Two Phase Locking are never conflict serializable

Your answer is correct.

The correct answer is: Schedules generated by Two Phase Locking are always conflict serializable, Schedules generated by Two Phase Locking are always view serializable

Finish review