

Exam 2020.12.21 Results for Shikhiyev Fardin (V1M0D5)

❗ Correct answers are hidden.

Score for this quiz: **28** out of 60 *

Submitted Dec 21 at 5:10pm

This attempt took 52 minutes.

Incorrect

Question 1

0 / 2 pts

Fill in the blank space (...) with the appropriate notion.

... is the time while the disk controller positions the head assembly at the proper cylinder.

Rotation Latency

Question 2

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

In case of a ... index, data records are not sorted by the search key.

secondary

Incorrect

Question 3

0 / 2 pts

Fill in the blank space (...) with the appropriate notion.

A ... index is an index that computes the value of a function or expression involving one or more columns and stores it in the index.

multi-level

Question 4

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

... is a set of files containing records of changes made to data files.

online redo log

Question 5

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

A ... index is an index on multiple columns in a table.

☐

☒ composite

☐

☐

Question 6

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

A ... index is always dense.

Question 7**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... caches currently and recently used data blocks read from disk.

Question 8**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

The Oracle Database user ... owns all base tables and user-accessible views of the data dictionary.

Question 9**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

An ... is a set of logically contiguous data blocks.

Question 10**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... table is a table in which the data rows are stored in no particular order on disk.

Question 11**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... index is an index that has been divided into smaller and more manageable pieces.

Incorrect**Question 12****0 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

... is the time while the first sector of the block moves under the head.

Incorrect**Question 13****0 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A database data block consists of one or more ...

disk block

Incorrect

Question 14

0 / 2 pts

Fill in the blank space (...) with the appropriate notion.

... is the time while the first sector of the block moves under the head.

rotation latency

Question 15

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

RAID level ... means block level striping with dedicated parity disk.

4

Question 16

2 / 2 pts

Fill in the blank space (...) with the appropriate notion.

A ... index has index entries for only some of the search values, typically one entry per block.

Question 17**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... index physically reverses the bytes of each index key while keeping the column order.

Incorrect**Question 18****0 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... index determines the location of the records of the data file.

Question 19**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... is a schema object from which multiple users can generate unique integers.

Question 20**2 / 2 pts**

Fill in the blank space (...) with the appropriate notion.

A ... is an instruction passed to the optimizer through comments in an SQL statement.

Question 21**Not yet graded / 4 pts**

Give estimation for $T(W)$ if W is the result of the following query:

`SELECT * FROM R WHERE A=1 AND B=2;`

and we know the following parameters: $T(R) = 100000$, $V(R,A) = 100$, $V(R,B) = 200$.

Your Answer:

10000

Question 22**Not yet graded / 4 pts**

What is the cost of a Nested Loop join algorithm if we know the following parameters:

$B(R)=1000$, $B(S)=10000$, $M=1200$?

Your Answer:

12000

Question 23

Not yet graded / 4 pts

Give estimation for $B(R \times S)$, if we know the following parameters: $T(R)=1000$, $T(S)=2000$, $bf(R)=100$, $bf(S)=50$.

Your Answer:

1500

Question 24

Not yet graded / 4 pts

What is the average cost of a selection operation ($\text{SELECT } * \text{ FROM } R \text{ WHERE } A='x'$) if we use I , a B+ tree primary index? We know the following parameters: $T(R)=100000$, $V(R,A)=100000$, $HT(I)=5$.

Your Answer:

20000

Question 25

Not yet graded / 4 pts

Give estimation for the number of rows of a join operation ($R \text{ natural join } S$) if they have a common attribute A , A is key in R , A is foreign key in S , and we know the following parameters: $T(R)=1000$, $T(S)=2000$.

Your Answer:

Quiz Score: **28** out of 60