103 past_quiz

Back

Time left 1:58:30

Question 1

Not yet answered

Marked out of 5.00

Flag question

Which one of the following tables is in the third normal form?

Select one:

a. table (a, b, c, d) with primary key (a, b) and extra dependencies b -> c

b. table (a, b, c, d) with primary key (a, b) and extra dependencies c -> d

c. table (a, b, c, d) with primary key (a) and extra dependencies b -> c

d. table (a, b, c, d) with primary key (a) and extra dependencies c -> a

Next page

Back

Time left 1:58:26

Question 2

Not yet answered

Marked out of 5.00

Flag question

"Each lecturer only teaches one module. Some modules have co-teachers", what is the cardinality ratio of lecturer and module?

Select one:

a. One-to-many

b. One-to-one

c. Many-to-many

d. All other options are incorrect.

Next page

Time left 1:58:22

Question 3

Not yet answered

Marked out of 5.00

Flag question

a CHAR (6) NOT NULL	b CHAR(3) NOT NULL	c INTEGER	d CHAR(20)
...			

Which row(s) below can be inserted into the table above?

Select one:

a. (NULL, '103', 80, 'optional')

b. ('10086', '101', NULL, NULL)

c. ('100085', NULL, 50, " ")

d. ('10084', '105', 60, *comps_*or *y*)

Next page

Time left 1:58:19

Question 4

Not yet answered

Marked out of 5.00

Flag question

Which one of the following statements is wrong about functional dependency?

Select one:

a. A table with its primary key applied on a single column may have partial dependencies.

b. A table with its primary key applied on multiple columns may have partial dependencies.

c. A table with its primary key applied on a single column may have transitive dependencies.

d. A table with its primary key applied on multiple columns may have transitive dependencies.

Next page

Back

Time left 1:58:16

Question 5

Not yet answered

Marked out of 5.00

Flag question

Given a table with 3 columns (A, B, C) and a cardinality of 10. If (A) is the primary key. Which one of the follow statements is true? (Note: No NULLs in this table)

Select one:

a. The number of different values in the cells of this table is exactly 30.

b. The number of different values in the cells of this table is more than 10.

c. The number of different values in the cells of this table is less than 30.

d. None of the other options is correct.

Next page

Back

Time left 1:58:13

Question 6

Not yet answered

Marked out of 5.00

Flag question

Which of the following LIKE usages can find the module called “Database Interfaces” in MySQL with default database settings?

Select one or more:

a. LIKE 'database Interfaces'

b. LIKE 'Database_'

c. LIKE 'Database%'

d. LIKE '%Data%inter%'

Next page

Time left 1:58:09

Question 7

Not yet answered

Marked out of 5.00

Flag question

Given a table r and s, which of the following item(s) do NOT appear in the result of SELECT r.b + s.c FROM r RIGHT OUTER JOIN s on r.a > s.a?

r

a	b	c
1	2	3
2	3	2
5	3	6

s

a	b	c
2	5	3
2	5	4
2	5	3

Select one or more:

- a. NULL
- b. 5
- c. 6
- d. 7

Next page

Time left 1:58:05

Question 8

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements is/are correct for MySQL?

Select one or more:

- a. "ALTER TABLE table DROP INDEX name" removes a primary key.
- b. "ALTER TABLE table DROP UNIQUE name" removes a unique key.
- c. "ALTER TABLE table DROP FOREIGN KEY name" removes a foreign key.
- d. "ALTER TABLE table DROP COLUMN name" removes a column.

Next page

Time left 1:58:02

Question 9

Not yet answered

Marked out of 5.00

Flag question

Which one of the following statements is always able to get all id numbers from the person table?

- a. SELECT ALL id FROM person.
- b. SELECT id FROM person WHERE id > 9.
- c. SELECT ALL id FROM person WHERE id > id - 1.
- d. SEELCT * FROM ID.

Next page

Time left 1:57:59

Question 10

Not yet answered

Marked out of 5.00

Flag question

"Each student is enrolled in up to 5 modules. A module has many students", what is the cardinality ratio of student and module?

Select one:

a. One-to-many

b. One-to-one

c. Many-to-many

d. Zero-to-Five

Next page

Time left 1:57:56

Question 11

Not yet answered

Marked out of 5.00

Flag question

Given a table T (a, b, c, d, e, f, g) with (a, b, c) being the primary key and the following additional functional dependencies:
c -> e, f
e -> f
a -> g
After normalizing this table into 3NF, which of the following tables is/are not in the result?

Select one or more:

a. T1 (c, e) with primary key (c)

b. T2 (c, e, f) with primary key (c)

c. T3 (a, b, c, g) with primary key (a, b, c)

d. T4 (a, b, c, d) with primary key (a, b, c)

e. T5 (e, f) with primary key (e)

Next page

Time left 1:57:53

Question 12

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements is/are correct about using default values to represent missing information?

Select one or more:

a. Database treat default values as normal data.

b. Default values are flexible in that they can represent different types of missing information, such as unknown data or inapplicable.

c. SQL allows specifying multiple default values for a single column.

d. All options are correct.

Next page

Time left 1:57:50

Question 13

Not yet answered

Marked out of 5.00

Flag question

Which one(s) of the following statements are true about update anomalies?

Select one or more:

- a. Insert anomalies can occur when a table has partial dependencies.
- b. Delete anomalies can occur when a table has transitive dependencies.
- c. Modification anomalies can occur when a table is in unnormalized form.
- d. Normalizing a table can help reduce update anomalies.

Next page

Time left 1:57:46

Question 14

Not yet answered

Marked out of 5.00

Flag question

Given table A (c1, c2) with 7 rows of data, table B (c2, c3) with 5 rows of data.
"SELECT * FROM A LEFT OUTER JOIN B ON A.c2 = B.c2" will generate up to ☐ rows.
"SELECT * FROM A RIGHT OUTER JOIN B ON A.c2 = B.c2" will generate up to ☐ rows.

Next page

Time left 1:57:40

Question 15

Not yet answered

Marked out of 5.00

Flag question

Given tables r and s shown below. Which one of the following tuples is in the result after executing the query

"SELECT a, r.b, s.b, c, d FROM r INNER JOIN s USING (r.a < s.c AND r.b < s.b)"

r

a	b
1	4
3	5
6	6

s

b	c	d
2	4	6
4	6	4
5	7	9

Select one:

- a. (3, 5, 2, 4, 6)
- b. (1, 4, 5, 7, 9)
- c. (6, 6, 2, 4, 6)
- d. (6, 6, 5, 7, 9)

Next page

Time left 1:57:36

Question 16

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements is/are true about the SELECT statement "SELECT part1 FROM part2 WHERE part3 GROUPED BY part4 HAVING part5":

Select one or more:

- a. Part 1 is evaluated first.
- b. Part 5 is evaluated after part3.
- c. Part 2 is evaluated after part1.
- d. Part 3 is the final step.

Next page

Time left 1:57:34

Question 17

Not yet answered

Marked out of 5.00

Flag question

Which ones of the following functional dependencies belong to this table? Assume book names are not unique (Each wrong answer leads to a 50% deduction)
Book (bookName, publisher, ISBN, authors, publishDate, publisherAddress)

Select one or more:

- a. bookName -> ISBN
- b. bookName -> authors
- c. bookName -> publishDate
- d. bookName -> publisher
- e. authors -> bookName
- f. authors -> bookName, publishDate
- g. publisher -> publishDate
- h. publisher -> publisherAddress
- i. publisher -> bookName
- j. ISBN -> bookName
- k. ISBN -> publisherAddress
- l. ISBN -> publishDate

Next page

Time left 1:57:31

Question 18

Not yet answered

Marked out of 5.00

Flag question

Which one(s) of the following statements calculates students' individual average marks? Assume that each student may take up to 7 modules.

Table: Marks (studentID, module, mark)

Select one or more:

- a. SELECT studentID, average(mark) FROM Marks GROUP BY studentID.
- b. SELECT studentID, avg(mark) FROM Marks GROUP BY module.
- c. SELECT studentID, sum(mark)/7 FROM Marks GROUP BY studentID.
- d. SELECT studentID, avg(mark) FROM Marks GROUP BY studentID.

Next page

Time left 1:57:28

Question 19

Not yet answered

Marked out of 5.00

Flag question

Q15. Which of the following three-valued logic expressions are/is evaluated to be "True" in SQL?

Select one or more:

- a. "(Unknown OR True) OR (Unknown > 27)"
- b. "(Unknown AND True) OR False"
- c. "(Unknown AND True) AND TRUE"
- d. "True OR (False AND (Unknown < 1))"

Next page

Time left 1:57:25

Question 20

Not yet answered

Marked out of 5.00

Flag question

Which of the following problems are associated with one-to-one (1:1) relationships?

Select one or more:

- a. They lead to data redundancy.
- b. They make queries with table joins less efficient.
- c. No foreign keys can be created for 1:1 relationships.
- d. It is hard to add primary keys for tables involved in 1:1 relationships

Next page

Time left 1:57:21

Question 21

Not yet answered

Marked out of 5.00

Flag question

Given a table T (a, b, c, d, e, f, g) with (a, b) being the primary key and the following additional functional dependencies:
b -> c, d
e -> f, g
d -> b
After normalizing this table to 3NF, which of the following tables are not in the result?

Select one or more:

- a. Table (b, c) with primary key (b)
- b. Table (a, b, e) with primary key (a, b)
- c. Table (a, b) with primary key (a, b)
- d. Table (e, f, g) with primary key (e)
- e. Table (d, b) with primary key (d)

Next page

Time left 1:57:18

Question 22

Not yet answered

Marked out of 5.00

Flag question

By converting an E-R diagram to a real database schema, One-to-many relationships in this diagram will become:

Select one:

a. Primary keys

b. Super keys

c. Candidate keys

d. Foreign keys

Next page

Time left 1:57:14

Question 23

Not yet answered

Marked out of 5.00

Flag question

Which one of the below follows the default display format of datetime in MySQL?

a. "1000-09-01"

b. "2011/09/21 19:00:01"

c. "9876-01-01 00:00:01.1"

d. "2013-01-01 21:41"

Next page

Time left 1:57:09

Question 24

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements always generates the same set of tuples as "SELECT * FROM a, b" in MySQL? Assume that table a has a single column $col1$ and table b has a single column $col2$.

Select one or more:

a. SELECT * FROM a CROSS JOIN b;

b. SELECT * FROM a, (SELECT * FROM b) as c;

c. SELECT * FROM (SELECT * FROM a, b) as c;

d. SELECT * FROM (a UNION b);

Next page

Time left 1:57:04

Question 25

Not yet answered

Marked out of 5.00

Flag question

Which of the following pieces of software are considered as DBMS?

Select one or more:

- a. MariaDB
- b. PhpMyAdmin
- c. MySQL
- d. Oracle DB
- e. Minesweeper

Next page

Time left 1:57:01

Question 26

Not yet answered

Marked out of 5.00

Flag question

Which one of the following statements can create an appropriate primary key for table Book (bookName, publisher, ISBN, author, publishDate, publisherAddress) ?

Select one or more:

- a. ALTER TABLE Book ADD CONSTRAINT pk PRIMARY KEY (bookName);
- b. ALTER TABLE Book CREATE PRIMARY KEY (bookName);
- c. ALTER TABLE Book ADD CONSTRAINT pk PRIMARY KEY (publisher, publishDate);
- d. ALTER TABLE Book ADD CONSTRAINT pk PRIMARY KEY (ISBN);

Next page

Time left 1:56:57

Question 27

Not yet answered

Marked out of 5.00

Flag question

Which one of the following cases has partial dependency?

Select one or more:

- a. For table (a, b, c, d) with primary key on column (a).
  a -> b, c is a partial dependency.
- b. For table (a, b, c, d) with primary key on column (a).
  b -> d, c is a partial dependency.
- c. For table (a, b, c, d) with primary key on column (a, b).
  b -> d is a partial dependency.
- d. For table (a, b, c, d) with primary key on column (a, b).
  b -> a is a partial dependency.

Next page

Time left 1:56:55

Question 28

Not yet answered

Marked out of 5.00

Flag question

Which one(s) of the following SELECT statements about tables a and b leads to errors?

Select one or more:

- a. SELECT * FROM a UNION b;
- b. SELECT * FROM (SELECT * FROM a) UNION (SELECT * FROM b);
- c. SELECT * FROM ((SELECT * FROM a) UNION (SELECT * FROM b)) AS ab;
- d. (SELECT * FROM a) UNION (SELECT * FROM b);

Next page

Time left 1:56:53

Question 29

Not yet answered

Marked out of 5.00

Flag question

Which one of the following tables has a transitive dependency?

Select one:

- a. For table (a, b, c, d) with primary key on column (a, b) and the dependency b - > c.
- b. For table (a, b, c, d) with primary key on column (a, b) and the dependency c - > d.
- c. For table (a, b, c, d) with primary key on column (a) and the dependency c - > a.
- d. For table (a, b, c, d) with primary key on column (a) and the dependency a -> d.

Next page

Time left 1:56:50

Question 30

Not yet answered

Marked out of 5.00

Flag question

Which one of the following INSERT statement is correct?

- a. INSERT INTO emp (ename,hiredate,sal) VALUES (value1,value2,value3);
- b. INSERT INTO emp (ename,sal) VALUES (value1,value2,value3);
- c. INSERT INTO emp (ename) VALUES (value1,value2,value3);
- d. INSERT INTO emp (ename,hiredate,sal) VALUES (value1,value2);

Next page

Time left 1:56:45

Question 31

Not yet answered

Marked out of 5.00

Flag question

Which one of the following statements is true about normalization?

Select one:

a. A table can be in 3NF but not in 2NF.

b. A table without transitive dependencies can be in 3NF or 1NF

c. A table with partial dependencies is in 2NF but not in 3NF.

d. 2NF removes partial dependencies on all candidate keys

Next page

Time left 1:56:42

Question 32

Not yet answered

Marked out of 5.00

Flag question

Which one of the follow statements is true?

Select one or more:

a. Domain refers to the number of tuples allowed in a schema.

b. SQL stands for "Standard Quiz Language".

c. A relation can have 0 records but must have more than 0 fields.

d. The relational model is the earliest model for managing data.

Next page

Time left 1:56:39

Question 33

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements calculate(s) the average of students' marks?
Table definition: marks (id INT PRIMARY KEY, mark INT)

Select one or more:

a. SELECT avg(mark) FROM marks;

b. SELECT sum(mark)/count(id) FROM marks;

c. SELECT average(mark) FROM marks;

d. All of the options are correct

Next page

Time left 1:56:36

Question 34

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements can get the list of staff member(s) who is of the same age as another staff in the same table?

Table: Staff (staffID, age).

Select one or more:

- a. SELECT DISTINCT staffID FROM Staff s1 WHERE age IN (SELECT age FROM Staff s2 WHERE s1.staffID <> s2.staffID);
- b. SELECT DISTINCT s1.staffID FROM staff s1, staff s2 WHERE s1.age = s2.age AND s1.staffID <> s2.staffID;
- c. SELECT DISTINCT s1.staffID FROM Staff s1, Staff s2 WHERE s1.staffID = s2.staffID AND s1.age = s2.age;
- d. SELECT DISTINCT staffID FROM Staff WHERE age = ANY (SELECT age FROM Staff);

Next page

Time left 1:56:33

Question 35

Not yet answered

Marked out of 5.00

Flag question

Given tables r and s shown below. Which of the following tuples is/are in the result after executing the query "SELECT a, b, d FROM r NATURAL JOIN (SELECT c as a, b, d FROM s) as t"

r

a	b
1	2
3	4
5	6
7	8
9	0

s

b	c	d
4	3	1
5	6	1
8	7	2
9	0	2
0	9	3

Select one or more:

- a. (3, 4, 1)
- b. (7, 8, 2)
- c. (9, 0, 9)
- d. (7, 8, 9)
- e. (6, 5, 1)
- f. (9, 0, 2)

Time left 1:56:30

Question 36

Not yet answered

Marked out of 5.00

Flag question

Which of the following string value(s) are/is incorrect? (There's no double quote in this question)

Select one or more:

- a. 'example string'
- b. 'example string''
- c. 'example string\'
- d. 'example ''string''
- e. 'example \'string'' '
- f. 'example \'string\'

Next page

Time left 1:56:26

Question 37

Not yet answered

Marked out of 5.00

Flag question

Which one(s) of the following statements can find the list of students who scored higher than the average? The table is: m_list (student, mark)

Select one or more:

- a. SELECT student FROM m_list WHERE mark > avg(mark);
- b. SELECT student FROM m_list WHERE mark > (SELECT avg(mark) FROM m_list);
- c. SELECT student FROM m_list AS t1 WHERE exists(SELECT * FROM m_list AS t2 WHERE t1.mark > avg(t1.mark);
- d. SELECT m_list.student FROM m_list INNER JOIN (SELECT avg(mark) AS x FROM m_list) AS t2 ON (1 + 1 = 2) WHERE mark > x;

Next page

Time left 1:56:23

Question 38

Not yet answered

Marked out of 5.00

Flag question

Given a table with 3 columns (A, B, C) and a cardinality of 10. If (A, B) is the primary key. Which one of the follow statements is true? (Note: No NULLs in this table)

Select one:

- a. The number of different values in the cells of this table is greater than 10.
- b. The number of different values in the cells of this table is greater or equals to 10.
- c. The number of different values in the cells of this table is greater than 20.
- d. The number of different values in the cells of this table is greater or equals to 20.

Next page

Time left 1:56:20

Question 39

Not yet answered

Marked out of 5.00

Flag question

Which of the following three-valued logic expressions are/is evaluated to be "Unknown" in SQL?

Select one or more:

- a. "1 + Unknown"
- b. "True AND Unknown"
- c. "False OR Unknown"
- d. "True OR Unknown"

Next page

Time left 1:56:18

Question 40

Not yet answered

Marked out of 5.00

Flag question

Which of the following statements is/are true?

Select one or more:

- a. A table can have multiple primary keys.
- b. Foreign keys can reference to columns in the same table.
- c. NULLs can be inserted into one column of a primary key if it involves two columns. (e.g. Inserting (1, null))
- d. NULLs can be inserted into one column of a unique key if it involves two columns. (e.g. Inserting (1, null))

Finish attempt ...