

We have a table R with columns a,b,c,d,e where ad is the P.K. and the functional dependencies are  $a \rightarrow bc$  and  $cd \rightarrow e$

Select one:

- ☐ a. R is in 3NF but not in 2NF
- ☐ b. Blank answer
- ☒ c. R is in 2NF but not in 3NF
- ☒ d. R is not in 2NF

✗

What of the following sentences is an expression of one Codd's rule?

Select one:

- ☒ a. It must be able to insert, update or delete more than one row at the same time.
- ☐ b. Blank answer
- ☒ c. Information is presented in tables and files
- ☐ d. NULL values are represented by using the empty chain

✗

The SQL sentence:

```
GRANT DELETE, INSERT, UPDATE
ON OB12
TO NU98W3
```

Select one:

- ☐ a. Blank answer
- ☐ b. Is not correct. A WITH GRANT OPTION has to be added
- ☒ c. Establish a reading and writing authorization on user OB12 to the VIEW NU98W3
- ☒ d. Establish a reading authorization on table OB12 for the user NU98W3

✗

Given the following SQL sentence:

```
SELECT * FROM CUSTOMERS CU1
WHERE NOT EXISTS
(SELECT * FROM CUSTOMERS CU2
WHERE CU1.CUST_ID=CU2.CUST_ID)
```

Select one:

- ☐ a. It returns a less quantity of rows than CUSTOMERS
- ☐ b. Blank answer
- ☒ c. It renders an empty set of rows
- ☐ d. It outputs more rows than CUSTOMERS has

✓

Given the following table:

```
Character Kingdom Capital
=====
Sansa Stark Winterfell
Arya Stark Winterfell
Jaime Lannister Casterly Rock
Cersei Lannister Casterly Rock
Stannis Baratheon Stormlands
```

Select one:

- ☐ a. Blank answer
- ☒ b. There exists a functional dependency from Character to Capital
- ☒ c. There exists a transitive functional dependency from Kingdom to Capital
- ☐ d. There exists a full functional dependency from Character and Kingdom to Capital

✗

We have a table R and a trigger TR of INSERT with BEFORE and FOR EACH ROW.

Select one:

- ☐ a. Blank answer
- ☒ b. When an INSERT is executed on R, previously the body of the TR is executed as many times as rows are inserted
- ☐ c. When an INSERT is executed on R, then the body of the TR is executed as many times as rows are inserted
- ☐ d. Since the INSERT only can produce a new row in the table, the FOR EACH ROW is omitted.

✓

Given the following two SQL sentences:

```
SELECT PROD_ID  
FROM PRODUCTS CU1  
WHERE PROD_ID=115  
GROUP BY PROD_ID
```

and

```
SELECT PROD_ID  
FROM PRODUCTS CU1  
WHERE PROD_ID=115
```

Select one:

- ☐ a. Blank answer
- ☒ b. They renders different outputs
- ☒ c. It always returns the same result
- ☐ d. It return the same result only if product 115 exists

✗

We have to implement a M:M relationship between entity A (with a1 as P.K.) and entity B (with b1 b2 as P.K.)

Select one:

- ☐ a. Blank answer
- ☒ b. We create another table with attributes a1, b1 and b2, forming the PK and where a1 references A and b1 b2 reference B
- ☐ c. We create another table with attributes a1, b1 and b2, where a1 references A and b1 b2 reference B
- ☐ d. We add two columns to table A and one extra attribute in B to mutually reference one table to the other

✓

What of the following sentences is right?

Select one:

- ☒ a. A schema is the description of one of the levels of the database in the ANSI-SPARC report.
- ☐ b. A schema is a set of tuple of pairs attribute-value
- ☐ c. Blank answer
- ☐ d. A SQL sentence returns a relational schema or a set of tuples, but no both of them.

✓

The main goal of normalization is:

Select one:

- ☐ a. Changing the external level with no changes in the conceptual one
- ☐ b. Avoiding the unauthorized access to the database
- ☒ c. Minimizing the redundancy and, consequently, the insert, update and deletion anomalies
- ☐ d. Blank answer

✓