

Quiz

Due Dec 27 at 10am **Points** 30 **Questions** 15 **Available** Dec 27 at 9:30am - Dec 27 at 10am 30 minutes
Time Limit 30 Minutes

Instructions

Dear Participants,

This is an In-class quiz on Database Management Course. It has 15 questions and the duration is 30 mins.

Regards,

Program Office

This quiz was locked Dec 27 at 10am.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	29 minutes	28 out of 30

Score for this quiz: **28** out of 30

Submitted Dec 27 at 10am

This attempt took 29 minutes.

Question 1

2 / 2 pts

Which of these following statements is/are TRUE?

- i) There can be more than one primary key in a table
- ii) There can be more than one foreign key in a table
- iii) Primary key can be composite
- iv) Foreign key can be composite

☐ Only i) and ii)

☐ Only ii) and iii)

☒ Only ii), iii) and iv)

☐ All of them

Correct!

Question 2

2 / 2 pts

How does a 1:N relationship among two entities get converted into tables during physical design?

Correct!

- ☒ Key of entity from '1' side will be used as foreign key in 'N' side entity
- ☐ Key of entity from 'N' side will be used as foreign key in '1' side entity
- ☐ A third table is used to store the relationship information
- ☐ No relationship information is stored

Question 3**2 / 2 pts**

How many rows will be fetched in the following query?

```
SELECT emp_id, name, salary FROM Emp WHERE salary < 1000 AND salary > 2000;
```

- ☐ No. of rows where all salaries < 1000
- ☐ No. of rows where all salaries > 2000
- ☐ No. of rows where salary is between 1000 and 2000

Correct!

- ☒ No rows

Question 4**2 / 2 pts**

Consider the following query that tries to get the customers who have placed some orders:

```
SELECT cust_id FROM Customer
```

```
WHERE EXISTS (SELECT cust_id FROM Ord_hdr WHERE status = 'Shipped');
```

If Customer table has 100 rows, Ord_hdr has 1000 rows, and only 50 customers have placed the orders (and shipped to them too), how many rows will this query fetch?

- ☐ 50
- ☒ 100
- ☐ 1000
- ☐ Cannot be determined

Correct!**Question 5****2 / 2 pts**

Emp table has 100 rows with no dept id assigned to 10 employees. Dept table has 30 rows with 10 departments having no employees. How many rows will be fetched if " Emp RIGHT JOIN Dept" is done

based on common dept_id column between these two tables?

☐ 90

Correct!

☒ 100

☐ 110

☐ 120

Question 6

2 / 2 pts

What will be the output of this query and why?
SELECT CASE WHEN NULL = NULL THEN 'YES'
ELSE 'NO' END AS Result;

☐ YES

Correct!

☒ NO

☐ NULL

☐ Error

Question 7

2 / 2 pts

The statement SELECT COUNT(*) FROM Orders; will give the total no. of rows in Orders table. What other COUNT(__) expressions will also give the same output?

Correct!

☒ COUNT(order_id) with order_id as primary key

☐ COUNT(order_status) with few statuses null

☐ COUNT(any column name), always

☐ COUNT(NULL)

Question 8

0 / 2 pts

Which of these queries is equivalent to following query?
SELECT empid, COUNT(*) OVER(PARTITION BY deptid) FROM Emp;

You Answered

☐ SELECT empid, COUNT(*) FROM Emp GROUP BY empid;☒ SELECT empid, COUNT(deptid) FROM Emp GROUP BY deptid;☐ SELECT empid, d.empcount FROM Emp e1, (SELECT COUNT(deptid) AS empcnt FROM Emp e2 WHERE e1.empid = e2.empid) d;

Correct Answer

☐ SELECT empid, (SELECT COUNT(*) FROM Emp e2 WHERE e1.deptid = e2.deptid) FROM Emp e1;

Question 9

2 / 2 pts

What will be the output of this query?
SELECT SUM(salary) / (SELECT SUM(salary) FROM Emp) AS result
FROM Emp GROUP BY dept_id;

☐ Ratio of sum of salaries of 100 employees to total salary of all employees☐ Ratio of all salaries of employees to total salary☐ Ratio of sum of salaries of a dept. with total salaries of all employees

Correct!

☒ Ratio of sum of salaries of each dept. to total salaries of all employees

Question 10

2 / 2 pts

Which of these queries shows only the 2nd highest product price?

☒ SELECT MAX(price) FROM Product WHERE price < (SELECT MAX(price) FROM Product);☐ SELECT price FROM Product ORDER BY price DESC LIMIT 2;☐ SELECT product_id, MAX(price) AS max_price FROM Product GROUP BY product_id
ORDER BY max_price LIMIT 2;

Correct!



SELECT price FROM Product p1 WHERE 2 = (SELECT COUNT(price) FROM Product p2 WHERE p1.price > p2.price);

Question 11**2 / 2 pts**

Assume there are 100 rows in Orders table. Output of query: SELECT COUNT(cust_id) FROM Orders WHERE cust_id = 125; is 15. Value of one cust_id is NULL. What will be the output of SELECT COUNT(cust_id) FROM Orders WHERE cust_id <> 125;

Correct!☒ 84☐ 85☐ 100☐ NULL**Question 12****2 / 2 pts**

Consider Emp table with following data:

Id Name Sex Salary

1 A m 2500

2 B f 1500

3 C m 5500

4 D f 500

Which of these queries shows 'm' in place of 'f' and 'f' in place of 'm' for 'sex' column?

☐ SELECT sex FROM Emp WHERE 'm' = 'f' AND 'f' = 'm';☐ SELECT IF('m', 'f', 'm') AS sex FROM Emp;**Correct!**☒ SELECT CASE sex WHEN 'm' THEN 'f' ELSE 'm' END AS sex FROM Emp;☐ SELECT CASE WHEN 'm' = 'm' THEN 'f' ELSE 'm' END AS sex FROM Emp;**Question 13****2 / 2 pts**

Tables A & B both have one column (ID) each. Values of A are: 10, 20, 30, 40, 50. Values of B are: 10, 30, 50.

How to show values that only in A but not in B without using NOT keyword?

Correct!

- ☐ SELECT A.id from A INNER JOIN B ON A.id = B.id WHERE B.id IS NULL;
- ☐ SELECT A.id from A RIGHT JOIN B ON A.id = B.id WHERE B.id IS NULL;
- ☒ SELECT A.id from A LEFT JOIN B ON A.id = B.id WHERE B.id IS NULL;
- ☐ SELECT A.id from A LEFT JOIN B ON A.id = B.id WHERE B.id IS NOT NULL;

Question 14

2 / 2 pts

Which of these queries will result in an error?

Correct!

- ☐ SELECT SUM(salary) FROM Emp GROUP BY deptid HAVING deptid = 30;
- ☐ SELECT deptid, AVG(salary) FROM Emp WHERE salary > 1000 GROUP BY deptid;
- ☒ SELECT deptid, AVG(salary) FROM Emp WHERE salary > 1000 GROUP BY deptid ORDER BY empid;
- ☐ None of these will result in any error.

Question 15

2 / 2 pts

Which of these queries shows the customers who stay in the same locality (address & city) as 'Anita Rao'?

Correct!

- ☐ SELECT custid, name FROM Customer c1 WHERE c1.name = 'Anita Rao' AND EXISTS (SELECT 1 FROM Customer c2 WHERE c1.custid != c2.custid AND c1.addressline2 = c2.addressline2 AND c1.city = c2.city);
- ☒ SELECT custid, name FROM Customer c1 WHERE c1.name != 'Anita Rao' AND EXISTS (SELECT 1 FROM Customer c2 WHERE c2.name = 'Anita Rao' AND c1.custid != c2.custid AND c1.addressline2 = c2.addressline2 AND c1.city = c2.city);
- ☐ SELECT custid, name FROM Customer c1 WHERE c1.name = 'Anita Rao' AND EXISTS (SELECT 1 FROM Customer c2 WHERE c2.name != 'Anita Rao' AND c1.custid = c2.custid AND c1.addressline2 = c2.addressline2 AND c1.city = c2.city);



```
SELECT custid, name FROM Customer c1 WHERE c1.name = 'Anita Rao' AND EXISTS  
(SELECT 1 FROM Customer c2 WHERE c2.name = 'Anita Rao' AND c1.addressline2 !=  
c2.addressline2 AND c1.city != c2.city);
```

Quiz Score: **28** out of 30