CREATE TABLE players (player_id SERIAL PRIMARY KEY, name VARCHAR(100), team_id INT):
CREATE TABLE teams (team_ id SERIAL PRIMARY KEY, team_name VARCHAR(100)):
any team? Which SQL statement fetches all player names who don't belong to
SELECT name FROM players LEFT JOIN teams ON players.team_id = teams.team_ id WHERE teams.team_id IS NULL;
SELECT name FROM players FULL JOIN teams ON players.team id = teams.team_id WHERE players.team id IS NULL;
SELECT name FROM players INNER JOIN teams ON players. team_id = teams.team_id WHERE teams.team_id IS NULL;
SELECT name FROM players RIGHT JOIN teams ON players. team_id = teams.team id WHERE players.team_id IS NULL;

Which of the following statements about the SERIAL data type is true in PostgreSQL?
SERIAL does not guarantee the values are sequential upon insertion.
SERIAL ensures there are no gaps in the sequence of assigned values even when rows are deleted.
Both A and
B are correct.
SERIAL type creates a sequence and sets the column default value to the next value of the sequence.

If you want to retrieve distinct values of the designation' column from the 'Employees' table, which
SQL statement would you use?
• SELECT DISTINCT designation FROM Employees;
O SELECT
FROM Employees WHERE UNIQUE designation,
SELECT designation FROM Employees DISTINCT,
SELECT UNIQUE designation) FROM Employees

You have a Movies table and an Actors table. Given that an actor can act in multiple movies and a
movie can have multiple actors, there's also an intermediate table Movie _Actors to manage this
relationship. Which type of relationship does the Movie_Actors table facilitate?
One-to-Many
Many-to-One
Many-to-Many
One-to-One

Select a valid example of a query using JOIN. This query will output the order ID and seller name:
SELECT o.id, s.id from Orders AS o JOIN Sellers ASs ON o.seller id = s.id
SELECT id AND seller name FROM Orders JOIN Sellers ON seller id = id
SELECT o.id, s.id FROM Orders JOIN Sellers WHEN o.seller id = s.id
SELECT o.id, s.id FROM Orders AS o LEFT JOIN ON Sellers AND Orders.

Given a table -employees" (columns: id. name, salary, department id. which SOL statement retrieves
the names and salaries of employees who earn more than the average salary in their respective
departments?
SELECT name, salary FROM employees WHERE salary - (SELECT AVG(salary) FROM employees GROUP BY
department id:
•
SELECT name, salary FROM employees e1 WHERE Salary > (SELECT AVG(salary) FROM employees 42 WHERE e1.department _id = e2.department _id);
SELECT name, salary FROM employees WHERE Salary > (SELECT AVG(salary) FROM employees): 0
SELECT name. salary FROM employees WHERE salary » AVG(salary) GROUP BY department, id:

listed? In what order can default values and constraints be
listed together Default values and constraints cannot be O
Default values must come before constraints •
They can be listed in any order
Constraints must come before default values •

An attribute A of datatype varchar(20) has the value Avi"
value "Reed". Here attribute A has
The attribute B of data type char(20) has
characters and attribute B has
characters.
20.20
20.4
3.4
3.20

Which of the
following statements accurately describes the purpose
(DDL) in a database?
of Data Definition Language
DDL is used
to define the structure of a database
DDL used to perform transactions in a database iS
DDL is used to retrieve data from a database
used to create DDL is
reports based on database information

How can parentheses be used in JOIN clauses?
To control the join order
To group columns in the joined table

join condition To specify the
Parentheses cannot be used in JOIN clauses

If you Age of table Person, then which constraint will want to allow age of a person > 18 in the column
applied be to AGE column.
Unique
Default
NOT NULL
Check

a many-to-many relationship? Which of these scenarios best represents
Houses to their postal address.
(VINA Cars to their Vehicle Identification Number
Users to their email addresses in an authentication system.
the courses they're enrolled in at a university. Students to

In a FULL OUTER JOIN, no the tables, what will be the result for of matching rows in one if there are
columns?
be filled with NULLs. O They will
They will be filled with zeros. •
They will contain default values.
They will contain the values from the other table.

If you have a "students" table (columns: id, name, major) and a graduates" table (columns: student jd,
graduation_date), which query selects the names of students who have not graduated?
SELECT name FROM students s, graduates g WHERE s.id = g.student _id;
SELECT name FROM students, graduates WHERE students.id graduates.student id;
• SELECT name FROM students WHERE id IN (SELECT student jd FROM graduates%:
WHERE students.id =
WHERE NOT EXISTS (SELECT * FROM graduates
SELECT name FROM students
ates.student_id);
graduates

Given the tables students and courses with a junction table student courses, which SQL statement
"Databases"? fetches the names of students who have enrolled in the course named
SELECT student name
FROM students JOIN courses ON students.student id = courses.course id JOIN
'Databases': student_courses ON student _courses.student id = student.student id WHERE course name
SELECT student name FROM students WHERE
course name = 'Databases'
Sm

SELECT student name FROM students AND courses WHERE course name = 'Databases':
SELECT student name FROM students JOIN student courses ON students.student id student_
courses.student _id
JOIN courses ON courses.course id = student courses.course_ id WHERE courses.
course_name = 'Databases";

SQL function and format mask would you If you receive a date in the format "YYYY.MM.DD", which
use to convert this string to a DATE data type in PostgreSQL?
to char('2023.10.15, 'YYYY-MM-DD')
to_date('2023.10.15, 'YYYY.MM.DD')
to char('2023.10.15, 'YYYY.MM.DD')
to_ date('2023.10.15, 'YYYY-MM-DD')

Which of the following does clause do? the HAVING
Acts like a WHERE clause but is used for columns rather than groups.
Acts EXACTLY like a WHERE clause
rather than columns. Acts like a WHERE clause but is used for rows
groups rather rows. Acts like a WHERE clause but is used for than

Where is the correct way to delete a column in a table?
SELECT Users DROP COLUMN name •
ALTER TABLE Users DROP COLUMN name
TRUNCATE USerS DROP COLUMN Par
DROP UseR COLUMN FamE

An attribute A of datatype varchar(20) has the value "Avi". The attribute B of data type char(20) has
value "Reed". Here attribute A has
characters and attribute B has
characters.
20, 20
20, 4
3,4
3,20

In a self-join, a table is joined with..?
Itself.
same structure. Another table with the •
Its child table.
Its parent table.

Consider two tables: Teachers and Classrooms. Each classroom has one teacher. but each teacher
can have one or more classrooms. Which type of relationship does this depict?
Many- Many
One-to-Many

One-to- One

Which SQL statement adds a column named "date of birth" with the data
type "DATE" to the
employees" table?
MODIFY TABLE employees ADD date_of_ birth DATE: •
ADD COLUMN date of _birth DATE TO employees:
ALTER TABLE employees ADD date_of birth DATE;
ALTER TABLE employees ADD COLUMN date_of birth DATE;

What is the purpose of using the USING keyword in a JOIN statement?
• To specify the type of join (INNER, LEFT. etc.).
both tables. To avoid ambighity when the columns being joined have the same name in
To rename a column after joining,
To specify multiple •
columns for joining.

matches any string of
characters.
three characters. % matches any string of at
three
At least. All
Exactly, At least
All. Exactly
At least. Exactly

Which SQL statement adds a column named "date of birth" with the data
type "DATE" to the
employees" table?
MODIFY TABLE employees ADD date_of_ birth DATE: •
ADD COLUMN date of _birth DATE TO employees:
ALTER TABLE employees ADD date_of birth DATE;
ALTER TABLE employees ADD COLUMN date_of birth DATE;

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At least. All
Exactly, At least
All. Exactly
At least. Exactly

How does an index on an expression improve query performance?

that satisfy the expression. © By providing faster access to rows
© By eliminating the need for additional indexes on the table,
• By speeding i operations on the table.
By reducing the storage space required for the index, •

Can a trigger in PostgreSQL call a function written in
language other than SQL or PL/pg$QL?
© Yes. any language supported by PostgreSQL can be used,
• No, only PL/pg SQL can be used in triggers.
1 the language has explicit support for triggers. © Yes, but only
No only SQL can be used in triggers.

When can a View be updated?
• When it contains aggregate functions.
When it is derived from multiple base tables. •
© When it includes GROUP BY or HAVING clauses.
© When it is created from a simple SELECT query

What is the purpose of the DECLARE section in a PL/pgSQL block?
To execute SOL statements.
To define input and output parameters.
• To name the block for reference.
® To declare variables used within the block.

Which of the following is NOT a characteristic of a Materialized View?
Requires manual refreshing to update data. •
Automatically updates in real-time.
Stores data physically. •
© Can be indexed.

In PostgreSQL, which function is typically used inside : trigger to access the new row being inserted
modified?
O NEW
© THISO
CURRENT ROW ®
NEWO •

Which of the following statements are true of a view?
A view is not reusable
data into tables A view can not insert
• A view simplifies how users work with data
• A view joins static tables using user-defined parameters.

Under the Repeatable Read isolation level, if a transaction T1 reads
a set of rows and then another

transaction T2 inserts (not commited yet) a new row in that set before T1 completes, what will T1
observe if it re-reads the set?
[1 will see the new row inserted by T2.
T1 will encounter a serialization error.
T1's second read will be blocked until T2 commits.
T1 will not see the new row inserted by T2. •

Consider two transactions, T1 and T2. T1 reads a row, and then T2 updates that row and commits. If
T1 attempts to read the same row again. what will it observe under the Read Committed isolation
level?
© T1 will be Mocked until T2 commits,
b
• T1 will encounter an error.
© T1 will read the original value.
O T1 wilt read the updated value.

For which scenario would a partial index be particularly advantageous?
Creating an index on a column with very few unique values. •
Creating an index on every column in a large table.
© indexing a column where a specific subset of records is queried most often.
indexing a frequently updated column.

In PostgreSQL, what does function overloading refer to?
O Storing functions in different databases with the same name.
Having muttiple functions with the same name but different arguments. •
• Encrypting the function code for security purposes.
• Increasing the workload of a function.

What is a key advantage of using stored procedures in a databose?
database interaction Simplifying user interfaces for
Reducing round trips to database by executing complex operations on the server-side
Increasing data redundancy •
security
Automatically updating database schema