

PGCES Questions:

Question: 1

Select two incorrect statements about indexes.

- A. An index is created by 'CREATE INDEX', and deleted by 'DROP INDEX'.
- B. By using an index effectively, searching and sorting performs faster.
- C. There are B-tree, Hash, R-tree and GiST index types.
- D. By creating an index, performance always improves.
- E. Creating an unused index does not affect the performance of a database at all.

Question: 2

The table "score" is defined as follows:

gid | score

-----+-----

1 | 70

1 | 60

2 | 100

3 | 80

3 | 50

The following query was executed. Select the number of rows in the result.

```
SELECT gid, max(score) FROM score  
GROUP BY gid HAVING max(score) > 60;
```

- A. 1 row
- B. 2 rows
- C. 3 rows
- D. 4 rows
- E. 5 rows

Question: 3

Table "t1" is defined as follows:

```
CREATE TABLE t1 (value VARCHAR(5));
```

A set of SQL statements were executed in the following order. Select the number of rows that table "t1" has after execution.

```
BEGIN;  
INSERT INTO t1 VALUES ('AA');  
SAVEPOINT point1;  
INSERT INTO t1 VALUES ('BB');  
SAVEPOINT point2;  
INSERT INTO t1 VALUES ('CC');  
ROLLBACK TO point1;  
INSERT INTO t1 VALUES ('DD');  
END;
```

- A. 1 row
- B. 2 rows
- C. 3 rows
- D. 4 rows
- E. 0 rows

Question: 4

Select two suitable statements about sequences.

- A. A sequence always returns a 4-byte INTEGER type value, so the maximum value is 2147483647.
- B. A sequence is defined by 'CREATE SEQUENCE', and deleted by 'DROP SEQUENCE'.
- C. Although the "nextval" function is called during a transaction, it will have no effect if that transaction is rolled back.
- D. A sequence always generates 0 or consecutive positive numbers.
- E. A sequence number can be set by calling the "setval" function.

Question: 5

The "sample" table consists of the following data:

How many rows are returned by executing the following SQL statement?

```
SELECT DISTINCT ON (data) * FROM sample;
```

- A. 2 rows

- B. 3 rows
- C. 4 rows
- D. 5 rows
- E. 6 rows

Question: 6

Select the correct SQL statement which concatenates strings 'ABC' and 'abc' to form 'ABCabc'.

- A. SELECT 'ABC' . 'abc';
- B. SELECT cat('ABC', 'abc') FROM pg_operator;
- C. SELECT 'ABC' + 'abc';
- D. SELECT 'ABC' + 'abc' FROM pg_operator;
- E. SELECT 'ABC' || 'abc';

Question: 7

Select two correct descriptions about views.

- A. A view is created by 'DECLARE VIEW', and deleted by 'DROP VIEW'.
- B. A view is a virtual table which does not exist.
- C. A view is created to simplify complicated queries.
- D. You can create a view with the same name as already existing tables.
- E. A view only exists while the postmaster is running, and is deleted when the postmaster stops.

Question: 8

Table "t1" is defined below.

Table "t1" has a column "id" of type INTEGER, and a column "name" of type TEXT.

t1:

The following SQL is executed while client "A" is connected.

BEGIN;

SELECT * FROM t1 WHERE id = 2 FOR UPDATE;

SELECT * FROM t1 WHERE id = 1 FOR UPDATE; -- (*)

While the second 'SELECT' statement, shown with (*), is being executed, a separate client "B" connects and executes the following SQL.

Select the correct statement about the execution results.

UPDATE t1 SET name = 'turtle' WHERE id = 2;

Note: the default transaction isolation level is set to "read committed".

- A. The update process for client "B" is blocked until the current connection for client "A" is finished.
- B. The update process for client "B" is blocked until the current transaction for client "A" is finished.
- C. The 'UPDATE' process for client "B" proceeds regardless of the condition of client "A".
- D. The process of client "B" immediately generates an error.
- E. The processes for both clients are blocked, and an error stating that a deadlock has been detected is generated.

Question: 9

SQL statements were executed in the following order:

CREATE TABLE fmaster

(id INTEGER PRIMARY KEY, name TEXT);

CREATE TABLE ftrans

(id INTEGER REFERENCES fmaster (id), stat INTEGER, date DATE);

INSERT INTO fmaster VALUES (1, 'itemA');

INSERT INTO ftrans VALUES (1, 1, CURRENT_DATE);

Select two SQL statements that will generate an error when executed next.

- A. INSERT INTO ftrans VALUES (1, 1, CURRENT_DATE);
- B. INSERT INTO ftrans VALUES (2, 1, '2007-07-07');
- C. UPDATE fmaster SET name = 'itemAX' WHERE id = 1;
- D. UPDATE fmaster SET id = 100 WHERE id = 1;
- E. UPDATE ftrans SET id = 200 WHERE id = 1;

Question: 10

Select three SQL statements which return NULL.

- A. SELECT 0 = NULL;
- B. SELECT NULL != NULL;
- C. SELECT NULL IS NULL;
- D. SELECT NULL;

E. SELECT 'null':TEXT;

Question: 11

The table "custom" is defined below.

The "id" column and "introducer" column are of INTEGER type, and the "email" column is of TEXT type.

id | email | introducer

-----+-----+-----

2 | aaa@example.com | 1

3 | bbb@example.com | 2

4 | ccc@example.com | 2

Three SQL statements were executed in the following order:

INSERT INTO custom

SELECT max(id) + 1, 'ddd@example.com', 4 FROM custom;

UPDATE custom SET introducer = 999

WHERE email = 'bbb@example.com';

DELETE FROM custom

WHERE introducer NOT IN (SELECT id FROM custom);

Select the number of rows in the "custom" table after the execution.

A. 0 rows

B. 1 row

C. 2 rows

D. 3 rows

E. 4 rows

Question: 12

The "sample" table consists of the following data:

How many rows are returned by executing the following SQL statement?

SELECT * FROM sample WHERE v ~ 'ab';

A. 0 rows

B. 1 row

C. 2 rows

D. 3 rows

E. 4 rows

Question: 13

Select an incorrect statement regarding the following SQL statement. Note that "user_view" is a view.

CREATE OR REPLACE RULE rule_1 AS ON UPDATE TO user_view
DO INSTEAD NOTHING;

A. It is defining a rule "rule_1".

B. It will replace "rule_1" if it already exists.

C. Executing 'UPDATE user_view' will no longer output errors.

D. When executing 'UPDATE user_view', data is updated in the table that is the origin of the view.

E. 'DROP RULE rule_1 ON user_view' deletes the above definition.

Question: 14

The "animal" table consists of the following data:

Select the correct result returned by executing the following SQL statement:

SELECT name FROM animal ORDER BY weight DESC LIMIT 2 OFFSET 1;

A. A syntax error will occur.

Question: 15

Four SQL statements were executed in the following order.

CREATE TABLE foo (bar INT);

ALTER TABLE foo ALTER bar TYPE BIGINT;

ALTER TABLE foo ADD baz VARCHAR(5);

ALTER TABLE foo DROP bar;

Select two SQL statements that generate an error when executed.

A. INSERT INTO foo VALUES ('12345');

B. INSERT INTO foo VALUES ('5000000000');

C. INSERT INTO foo VALUES ('ABC');

- D. INSERT INTO foo VALUES (2000000000);
E. INSERT INTO foo VALUES (NULL);

Question: 16

A table named "sample" is defined as below. Select two statements which will generate a constraint error.

```
CREATE TABLE sample (  
  i INTEGER PRIMARY KEY,  
  j INTEGER,  
  CHECK ( i > 0 AND j < 0 )  
);
```

- A. INSERT INTO sample VALUES (1, 0);
B. INSERT INTO sample VALUES (2, -2);
C. INSERT INTO sample VALUES (3, NULL);
D. INSERT INTO sample VALUES (NULL, -4);
E. INSERT INTO sample VALUES (5, -5);

Question: 17

Given the following two table definitions, select one SQL statement which will cause an error.

```
CREATE TABLE sample1 (id INTEGER, data TEXT);  
CREATE TABLE sample2 (id INTEGER);
```

- A. SELECT id AS data, data FROM sample1;
B. SELECT id, id FROM sample1;
C. SELECT s1.id, s2.id FROM sample1 AS s1, sample1 AS s2;
D. SELECT s1.id, s2.id FROM sample1 s1, sample2 s2;
E. SELECT s1.id, s2.data FROM sample1 s1, sample2 s2;

Question: 18

Select two suitable statements regarding creating a new table.

- A. There is no upper limit to the number of columns in a table.
B. A newly created table is empty and has 0 rows.
C. You can only use alphabetic characters for a table name.
D. The row name must be within 16 characters.
E. The SQL 'CREATE TABLE' statement is used to create a new table.

Question: 19

The tables "t1" and "t2" are defined below.

The tables "t1" and "t2" have columns "id" which are type of INTEGER and column "name"s which are type of TEXT.

t1

t2

The following SQL command was executed. Select the number of rows in the result.

```
SELECT * FROM t1 NATURAL FULL OUTER JOIN t2;
```

- A. 2 rows
B. 3 rows
C. 4 rows
D. 5 rows
E. 6 rows

Question: 20

Select one option which cannot be specified using createdb.

- A. Database locale
B. Character encoding
C. Host name
D. Database owner
E. Template database

Question: 21

A sequence has the following definition:

```
CREATE SEQUENCE seq1 CACHE 10 CYCLE;
```

Select the value that is returned by executing the following SQL.

```
SELECT nextval('seq1');
```

- A. 0

- B. 1
- C. 10
- D. 11
- E. -10

Question: 22

A table and view are defined as follows:

```
CREATE TABLE item (id INT, name TEXT, description TEXT);
CREATE VIEW item_simple AS SELECT id, name FROM item;
```

A set of SQL statements were executed in the order below. Select the most appropriate statement concerning the execution results.

```
BEGIN;
SELECT * FROM item_simple;
INSERT INTO item_simple VALUES (1, 'item_name_1');
UPDATE item_simple SET name = 'item_name_2' WHERE id = 1;
DELETE FROM item_simple;
END;
```

- A. An error is generated at the point the SELECT statement is executed.
- B. An error is generated at the point the INSERT statement is executed.
- C. An error is generated at the point the UPDATE statement is executed.
- D. An error is generated at the point the DELETE statement is executed.
- E. No error is generated.

Question: 23

The present time is noon of July 7th, 2007, and the result of the following SQL sentence was '2007-07-17 12:00:00'.

Select the correct expression to fill in the blank below.

```
SELECT CURRENT_TIMESTAMP::timestamp + _____ ;
```

- A. '10 day'::timestamp
- B. '10 day'::interval
- C. 10::day
- D. 8640000::time
- E. age(8640000)

Question: 24

You want to set a constraint so that the "item_id" in the "sales" table will always have a value that already exists as "id" in the "item_master" table. Select the correct SQL statement to fill in the underlined blank of the "sales" table. Definitions:

```
CREATE TABLE item_master (
id INTEGER PRIMARY KEY,
name TEXT
);
```

```
CREATE TABLE sales (
sales_id INTEGER,
item_id INTEGER,
num INTEGER,
```

```
_____
);
```

- A. FOREIGN KEY (id) REFERENCES item_master (item_id)
- B. FOREIGN KEY (item_id) REFERENCES item_master (id)
- C. REFERENCES item_master (item_id)
- D. REFERENCES item_master (id)
- E. REFERENCES item_master (id) TO item_id

Question: 25

You want to delete rows in the "product" table which include the value '2004' in the "name" field. Select the correct statement to achieve this task.

- A. DELETE product WHERE name ~ '2004';
- B. DELETE product WHERE contain(name, '2004');
- C. DELETE FROM product WHERE name IN '2004';
- D. DELETE FROM product WHERE name LIKE '%2004%';
- E. DELETE FROM product WHERE name SIMILAR TO '2004';

Question: 26

There is a table "tb1" that has a column "c1" defined as type TEXT. The following SQL is executed while client "A" is connected.

BEGIN;

LOCK TABLE tb1 IN ACCESS EXCLUSIVE MODE;

SELECT * FROM tb1;

While the above 'SELECT' statement is being executed, client "B" connects to the same database and executes the following SQL.

Select two correct statements describing the behavior of PostgreSQL.

INSERT INTO tb1 (c1) VALUES ('new line');

Note: the default transaction isolation level is set to "read committed".

A. The process for client "B" is blocked until the current connection for client "A" is finished.

B. The process for client "B" is blocked until the current transaction for client "A" is finished.

C. The process for client "B" will be deleted regardless of the condition of client "A".

D. The process of client "B" will affect the SELECT result of client "A".

E. The process of client "B" will not affect the SELECT result of client "A".

Question: 27

The "sample" table consists of the following data.

How many rows are returned by executing the following SQL statement?

SELECT i FROM sample GROUP BY i;

A. 1 row

B. 2 rows

C. 3 rows

D. 4 rows

E. 5 rows

Question: 28

The tables "t1" and "t2" are defined below.

Tables "t1" and "t2" have columns "id" that are of INTEGER type, and columns "name" that are of TEXT type.

t1

t2

The following SQL command was executed. Select the number of rows in the result.

SELECT * FROM t1 RIGHT OUTER JOIN t2 ON t1.id = t2.id;

A. 2 rows

B. 3 rows

C. 4 rows

D. 5 rows

E. 6 rows

Question: 29

Given the following two table definitions, select one SQL statement which will cause an error.

CREATE TABLE sample1 (id INTEGER, data TEXT);

CREATE TABLE sample2 (id INTEGER);

A. SELECT s1.id FROM sample1 s1;

B. SELECT s1.id FROM sample1 AS s1;

C. SELECT data FROM sample1 AS s1, sample2 AS s2

WHERE s1.id = 1 AND s2.id = 2;

D. SELECT id, data FROM sample1 AS s1, sample2 AS s2

WHERE s1.id = s2.id;

E. SELECT s1.id, s1.data FROM sample1 AS s1, sample2 AS s2

WHERE s1.id = s2.id;

Question: 30

What happens if an SQL statement syntax error occurs while a transaction is running? Select the correct action from below.

A. The transaction continues.

B. The transaction is aborted and a new transaction is started automatically.

C. The transaction is stopped and you cannot issue any SQL commands other than a command to end the transaction.

D. The connection is terminated.

E. The "postmaster" process is terminated.

Question: 31

In the "customer" table, you want to change the "email" values which have an "id" value of 10000 or less, to NULL. Select the correct SQL statement to achieve this task.

- A. UPDATE email = NULL FROM customer WHERE id <= 10000;
- B. UPDATE customer SET email IS NULL WHERE id < 10001;
- C. UPDATE customer SET email = NULL WHERE id <= 10000;
- D. DELETE FROM customer.email WHERE id < 10001;
- E. UPDATE FROM customer SET email = NULL WHERE id <= 10000;

Question: 32

The tables "s1" and "s2" are defined below.

The column "id" for tables "s1" and "s2" is of INTEGER type. The column "enable" for table "s1" is of

BOOLEAN type, and the column "name" for table "s2" is of TEXT type.

s1:

id | enable

----+-----

1 | t

2 | f

s2:

id | name

----+-----

1 | post

2 | gre

3 | SQL

The following SQL was executed. Select the correct number of rows in the result.

SELECT * FROM s2 WHERE id IN (SELECT id FROM s1);

- A. 1 row
- B. 2 rows
- C. 3 rows
- D. 4 rows
- E. 5 rows

Question: 33

A table is defined as below. Select the most suitable description about the foreign key constraint.

CREATE TABLE master (id INTEGER PRIMARY KEY, name TEXT);

CREATE TABLE record (id INTEGER REFERENCES master (id), count INTEGER);

- A. If any row exists in the "record" table, no change can be made to the "master" table.
- B. If the "record" table contains a row with an "id", no change can be made at all to the corresponding "id" row in the "master" table.
- C. If the "record" table contains a row with an "id", the corresponding "id" row in the "master" table cannot be deleted.
- D. The "record" table cannot have duplicate "id"s.
- E. These SQL statements are invalid; no constraints are created.

Question: 34

Select the correct result generated by execution of the following SQL statements:

CREATE TABLE log (id int, message TEXT, logtime TIMESTAMP);

CREATE TABLE log_01 () INHERITS (log);

INSERT INTO log_01 VALUES (1, 'error', CURRENT_TIMESTAMP);

SELECT * FROM log;

- A. First 'CREATE TABLE' generates a syntax error.
- B. Second 'CREATE TABLE' generates a syntax error.
- C. 'INSERT' statement generates an error stating that the number of columns and values do not match".
- D. 'SELECT' statement returns 0 rows, and exits successfully.
- E. 'SELECT' statement returns 1 row, and exits successfully.

Question: 35

The "sample" table consists of the data below. The column "x" is of type INTEGER.

How many rows are returned by executing the following SQL statement?

SELECT 6 / x FROM sample

WHERE CASE WHEN x = 0 THEN FALSE ELSE TRUE END;

- A. "ERROR division by zero" and no rows are returned.
- B. 0 rows with no errors.
- C. 1 row
- D. 2 rows
- E. 3 rows

Question: 36

Select the correct SQL statement to define a new data type.

- A. CREATE CLASS
- B. CREATE FUNCTION
- C. CREATE OPERATOR
- D. CREATE DATABASE
- E. CREATE TYPE

Question: 37

The table "t1" is defined by the following SQL statement:

```
CREATE TABLE t1 (id integer, name varchar(20));
```

You want to increase the execution speed of the SQL statement below:

```
SELECT id, name FROM t1 WHERE id < 123 AND upper(name) = 'MAMMOTH';
```

Select the most suitable SQL statement to create an index.

- A. CREATE INDEX t1_idx ON t1 (id, upper(name));
- B. CREATE INDEX t1_idx ON t1 USING HASH (id);
- C. CREATE INDEX t1_idx ON t1 (name);
- D. ALTER TABLE ADD INDEX ON t1 (id, upper(name));
- E. ALTER TABLE ADD INDEX ON t1 (id, name);

Question: 38

The tables "t1" and "t2" are defined in the same way (they have the same data types and column names). You want to select rows in "t1" which are not in "t2".

Select a correct keyword to fill in the blank below.

```
SELECT * FROM t1 _____ SELECT * FROM t2;
```

- A. EXCEPT
- B. UNION
- C. NAND
- D. INTERSECT
- E. INTERSECT ALL

Question: 39

Select one false statement about the benefits of using database management systems from below.

- A. You can separate the data storage method from the application.
- B. You can separate the data search method from the application.
- C. You can separate the data display method from the application.
- D. You can reduce the programming workload of programming for managing data.
- E. You can share data more easily on systems consisting of multiple computers.

Question: 40

Select the most suitable statement about the creation of a new database.

- A. Only a PostgreSQL superuser is authorized to create a new database.
- B. The target directory is specified by the environment variable PGDATA or the -D parameter when creating a database.
- C. Only one database can be used at the same time even if two or more databases are created.
- D. Only the OS superuser (root) can create databases.
- E. You can set the character encoding when creating a new database.

Question: 41

Based on the relationship of columns within a table, select the most suitable description that shows that column A is dependent on column B.

- A. The value in column B is uniquely determined when a value in column A is selected.
- B. The value in column A is uniquely determined when a value in column B is selected.
- C. When the value in column A is changed, the corresponding value in column B also must be changed.

- D. When the value in column B is changed, the corresponding value of column A also must be changed.
- E. As long as column B exists, the amount of information will not decrease even if column A is deleted.

Question: 42

From the SQL commands below, select one that is generally classified as "DDL".

- A. START TRANSACTION
- B. CREATE TABLE
- C. SELECT
- D. INSERT
- E. DELETE

Question: 43

The table "foo" is defined as follows:

```
CREATE TABLE foo (bar TEXT);
```

Next, four SQL statements were executed in the following order.

```
INSERT INTO foo VALUES ('bar'); ----- (1)
```

```
ALTER TABLE foo ADD COLUMN c1 TEXT; ---- (2)
```

```
ALTER TABLE foo ADD UNIQUE (c1); ----- (3)
```

```
ALTER TABLE foo DROP COLUMN bar; ----- (4)
```

Select the correct statement from those below.

- A. An error occurs when executing the (1) SQL statement.
- B. An error occurs when executing the (2) SQL statement.
- C. An error occurs when executing the (3) SQL statement.
- D. An error occurs when executing the (4) SQL statement.
- E. No error is generated.

Question: 44

A set of tables are defined as follows:

t1

t2

How many rows are returned by executing the following SQL statement?

```
SELECT * FROM t1
```

```
WHERE EXISTS (SELECT name FROM t2 WHERE t1.id = t2.id);
```

- A. 0 rows
- B. 2 rows
- C. 3 rows
- D. 5 rows
- E. 6 rows

Question: 45

SQL statements were executed in the following order.

```
CREATE TABLE book (
```

```
id VARCHAR(21), title TEXT NOT NULL, price INT,
```

```
UNIQUE (id), CHECK (price > 0)
```

```
);
```

```
INSERT INTO book VALUES ('4-12345-678-9', 'SQL book', 2300); --(1)
```

```
INSERT INTO book (title, price) VALUES ('PostgreSQL', 3000); --(2)
```

```
UPDATE book SET id = '4-12345-678-9' WHERE id IS NULL; --(3)
```

```
DELETE FROM book WHERE price < 0; --(4)
```

While executing, select the first location that generates an error.

- A. (1)
- B. (2)
- C. (3)
- D. (4)
- E. No error is generated.

Question: 46

Select one incorrect statement concerning the following SQL statement.

```
CREATE OR REPLACE VIEW sales_view
```

```
AS SELECT * FROM sales_table ORDER BY sales_date DESC LIMIT 10;
```

- A. Defines the view called "sales_view".

- B. Replaces "sales_view" if it already exists.
- C. When you 'SELECT' the "sales_view", it displays the first 10 records from the "sales_table" sorted by the "sales_date" column in descending order.
- D. Some errors occur when "SELECT * FROM sales_table" is executed after the view is defined.
- E. You can confirm that the "sales_view" has been added by querying the view called "pg_views".

Question: 47

A set of tables are defined as follows:

t1

t2

How many rows are returned by executing the following SQL statement?

SELECT * FROM t1 LEFT OUTER JOIN t2 USING (id);

- A. 2 rows
- B. 3 rows
- C. 4 rows
- D. 5 rows
- E. 6 rows

Question: 48

Table t1 is defined as follows:

CREATE TABLE t1 (value VARCHAR(5));

A set of SQL statements were executed in the following order. Select the number of rows that table "t1" has after execution.

BEGIN;

INSERT INTO t1 VALUES ('A');

SAVEPOINT sp;

INSERT INTO t1 VALUES ('B');

ROLLBACK TO sp;

INSERT INTO t1 VALUES ('C');

COMMIT;

- A. 1 row
- B. 2 rows
- C. 3 rows
- D. 4 rows
- E. 0 rows

Question: 49

SQL statements were executed in the following order:

CREATE TABLE fmaster

(id INTEGER PRIMARY KEY, name TEXT);

CREATE TABLE ftrans

(id INTEGER REFERENCES fmaster (id), stat INTEGER, date DATE);

INSERT INTO fmaster VALUES (1, 'itemA');

INSERT INTO ftrans VALUES (1, 1, CURRENT_DATE);

Select the two SQL statements that will generate an error when executed next.

- A. DROP TABLE ftrans;
- B. INSERT INTO fmaster VALUES (1, 'itemB');
- C. DELETE FROM fmaster;
- D. UPDATE fmaster SET name = NULL;
- E. INSERT INTO ftrans VALUES (1, 2, NULL);

Question: 50

The table "t1" is defined below.

The column "id" for table "t1" is of INTEGER type.

id | name

----+-----

1 | mammoth

2 | tortoise

3 | coelacanth

The following SQL statements were executed. Select the correct statement about the execution result.

BEGIN;

```
DECLARE c SCROLL CURSOR FOR SELECT name FROM t1 ORDER BY id;
MOVE FORWARD 2 FROM c;
FETCH FORWARD ALL FROM c;
COMMIT;
```

- A. The number of rows returned by the FETCH statement is 0.
- B. The number of rows returned by the FETCH statement is 1.
- C. The number of rows returned by the FETCH statement is 2.
- D. The number of rows returned by the FETCH statement is 3.
- E. An error occurs part way through.

Question: 51

Select two incorrect descriptions regarding the following SQL statements.

```
CREATE TABLE cities (
  name text,
  population float
);
```

```
CREATE TABLE capitals (
  state char(2)
) INHERITS (cities);
```

- A. Defines the tables called "cities" and "capitals".
- B. "capitals" inherits "cities".
- C. Searching "capitals" also searches rows in "cities".
- D. The columns "name" and "population" are also defined in "capitals".
- E. The second SQL statement results in an error, since the 'INHERITS' keyword is no longer available.

Question: 52

Select two SQL statements which abort a transaction.

- A. END
- B. ROLLBACK
- C. TRUNCATE
- D. ABORT
- E. DROP TRANSTACTION

Question: 53

The table "custom" is defined below.

The "id" column and "introducer" column are of INTEGER type, and the "email" column is of TEXT type.

```
id | email | introducer
---+-----+-----
2 | aaa@example.com | 1
3 | bbb@example.com | 2
4 | ccc@example.com | 2
```

Three SQL statements were executed in the following order:

```
UPDATE custom SET email = " FROM custom c
```

```
WHERE custom.introducer = c.id;
```

```
UPDATE custom SET introducer = NULL
```

```
WHERE introducer NOT IN (SELECT id FROM custom);
```

```
DELETE FROM custom WHERE id = 2 OR introducer = 2;
```

Select the number of rows in the "custom" table after the execution.

- A. 0 rows
- B. 1 row
- C. 2 rows
- D. 3 rows
- E. 4 rows

Question: 54

The "sample" table consists of the following data:

How many rows are returned by executing the following SQL statement?

```
SELECT i FROM sample GROUP BY i HAVING count(*) = 2;
```

- A. 0 rows
- B. 1 row
- C. 2 rows

- D. 3 rows
- E. 4 rows

Question: 55

A set of tables are defined as follows:

t1

t2

How many rows are returned by executing the following SQL statement?

SELECT t1.name FROM t1 CROSS JOIN t2;

- A. 0 rows
- B. 2 rows
- C. 3 rows
- D. 5 rows
- E. 6 rows

Question: 56

The table "score" is defined as follows:

gid | score

-----+-----

1 | 70

1 | 60

2 | 100

3 | 80

3 | 50

The following query was executed. Select the correct result value.

SELECT score FROM score ORDER BY gid DESC, score ASC LIMIT 1;

- A. 50
- B. 60
- C. 70
- D. 80
- E. 100

Question: 57

Given the following two table definitions, select one SQL statement which will cause an error.

CREATE TABLE sample1 (id INTEGER, data TEXT);

CREATE TABLE sample2 (id INTEGER);

- A. SELECT s1.id FROM sample1 s1;
- B. SELECT s1.id FROM sample1 AS s1;
- C. SELECT data FROM sample1 AS s1, sample2 AS s2
WHERE s1.id = 1 AND s2.id = 2;
- D. SELECT id, data FROM sample1 AS s1, sample2 AS s2
WHERE s1.id = s2.id;
- E. SELECT s1.id, s1.data FROM sample1 AS s1, sample2 AS s2
WHERE s1.id = s2.id;

Question: 58

A set of tables are defined as follows:

t1

t2

How many rows are returned by executing the following SQL statement?

SELECT * FROM t1 UNION ALL SELECT * FROM t2;

- A. 2 rows
- B. 3 rows
- C. 4 rows
- D. 5 rows
- E. An error will occur.

Question: 59

Select one statement which will cause a syntax error.

- A. SELECT (SELECT item FROM sale WHERE id = 1);
- B. SELECT * FROM (SELECT * FROM customer);
- C. SELECT * FROM item
WHERE cid IN (SELECT cid FROM customer);

D. SELECT * FROM sale
WHERE name IN (SELECT name FROM names);
E. SELECT * FROM sale
WHERE cid = ANY (SELECT cid FROM customer);

ORACLE Questions:

Question: 1

Which statement is true regarding the INTERSECT operator?

- A. It ignores NULL values.
- B. Reversing the order of the intersected tables alters the result.
- C. The names of columns in all SELECT statements must be identical.
- D. The number of columns and data types must be identical for all SELECT statements in the query.

Question: 2

View the Exhibit and examine the structure of the PROMOTIONS table.

Which two SQL statements would execute successfully? (Choose two.)

- A. UPDATE promotions
SET promo_cost = promo_cost+ 100
WHERE TO_CHAR(promo_end_date, 'yyyy') > '2000';
- B. SELECT promo_begin_date
FROM promotions
WHERE TO_CHAR(promo_begin_date, 'mon dd yy')='jul 01 98';
- C. UPDATE promotions
SET promo_cost = promo_cost+ 100
WHERE promo_end_date > TO_DATE(SUBSTR('01-JAN-2000',8));
- D. SELECT TO_CHAR(promo_begin_date, 'dd/month')
FROM promotions
WHERE promo_begin_date IN (TO_DATE('JUN 01 98'), TO_DATE('JUL 01 98'));

Question: 3

View the Exhibit and examine the structure of CUSTOMERS and SALES tables.

Evaluate the following SQL statement:

```
UPDATE (SELECT prod_id, cust_id, quantity_sold, time_id  
FROM sales)  
SET time_id = '22-MAR-2007'  
WHERE cust_id = (SELECT cust_id  
FROM customers  
WHERE cust_last_name = 'Roberts' AND  
credit_limit = 600);
```

Which statement is true regarding the execution of the above UPDATE statement?

- A. It would not execute because two tables cannot be used in a single UPDATE statement.
- B. It would not execute because the SELECT statement cannot be used in place of the table name.
- C. It would execute and restrict modifications to only the columns specified in the SELECT statement.
- D. It would not execute because a subquery cannot be used in the WHERE clause of an UPDATE statement.

Question: 4

Evaluate the following query:

```
SQL> SELECT TRUNC(ROUND(156.00,-1),-1)  
FROM DUAL;
```

What would be the outcome?

- A. 16
- B. 100
- C. 160
- D. 200
- E. 150

Question: 5

Which two statements are true regarding the COUNT function? (Choose two.)

- A. The COUNT function can be used only for CHAR, VARCHAR2, and NUMBER data types.
- B. COUNT(*) returns the number of rows including duplicate rows and rows containing NULL value in any of the columns.
- C. COUNT(cust_id) returns the number of rows including rows with duplicate customer IDs and NULL value in the CUST_ID column
- D. COUNT(DISTINCT inv_amt) returns the number of rows excluding rows containing duplicates and NULL values in the INV_AMT column.
- E. A SELECT statement using the COUNT function with a DISTINCT keyword cannot have a WHERE clause.

Question: 6

View the Exhibits and examine the structures of the PROMOTIONS and SALES tables.

Evaluate the following SQL statement:

```
SQL>SELECT p.promo_id, p.promo_name, s.prod_id
FROM sales s RIGHT OUTER JOIN promotions p
ON (s.promo_id = p.promo_id);
```

Which statement is true regarding the output of the above query?

- A. It gives the details of promos for which there have been sales.
- B. It gives the details of promos for which there have been no sales.
- C. It gives details of all promos irrespective of whether they have resulted in a sale or not.
- D. It gives details of product IDs that have been sold irrespective of whether they had a promo or not.

Question: 7

View the Exhibit and examine the structure of the CUSTOMERS table.

Evaluate the query statement:

```
SQL> SELECT cust_last_name, cust_city, cust_credit_limit
FROM customers
WHERE cust_last_name BETWEEN 'A' AND 'C' AND cust_credit_limit BETWEEN
1000 AND 3000;
```

What would be the outcome of the above statement?

- A. It executes successfully.
- B. It produces an error because the condition on CUST_LAST_NAME is invalid.
- C. It executes successfully only if the CUST_CREDIT_LIMIT column does not contain any null values.
- D. It produces an error because the AND operator cannot be used to combine multiple BETWEEN clauses.

Question: 8

Which two statements are true regarding the USING and ON clauses in table joins? (Choose two.)

- A. Both USING and ON clauses can be used for equijoins and nonequijoins.
- B. A maximum of one pair of columns can be joined between two tables using the ON clause.
- C. The ON clause can be used to join tables on columns that have different names but compatible data types.
- D. The WHERE clause can be used to apply additional conditions in SELECT statements containing the ON or the USING clause.

Question: 9

Where can subqueries be used? (Choose all that apply.)

- A. field names in the SELECT statement
- B. the FROM clause in the SELECT statement
- C. the HAVING clause in the SELECT statement
- D. the GROUP BY clause in the SELECT statement
- E. the WHERE clause in only the SELECT statement
- F. the WHERE clause in SELECT as well as all DML statements

Question: 10

Using the CUSTOMERS table, you need to generate a report that shows 50% of each credit amount in each income level. The report should NOT show any repeated credit amounts in each income level. Which query would give the required result?

- A. SELECT cust_income_level, DISTINCT cust_credit_limit * 0.50
AS "50% Credit Limit"

FROM customers;
 B. SELECT DISTINCT cust_income_level, DISTINCT cust_credit_limit * 0.50
 AS "50% Credit Limit"
 FROM customers;
 C. SELECT DISTINCT cust_income_level || ' ' || cust_credit_limit * 0.50
 AS "50% Credit Limit"
 FROM customers;
 D. SELECT cust_income_level || ' ' || cust_credit_limit * 0.50 AS "50% Credit Limit"
 FROM customers;

Question: 11

Which statement is true regarding the UNION operator?

- A. By default, the output is not sorted.
- B. NULL values are not ignored during duplicate checking.
- C. Names of all columns must be identical across all SELECT statements.
- D. The number of columns selected in all SELECT statements need not be the same.

Question: 12

Which two statements are true regarding working with dates? (Choose two.)

- A. The default internal storage of dates is in the numeric format.
- B. The default internal storage of dates is in the character format.
- C. The RR date format automatically calculates the century from the SYSDATE function and does not allow the user to enter the century.
- D. The RR date format automatically calculates the century from the SYSDATE function but allows the user to enter the century if required.

Question: 13

Evaluate the following SQL statement:

```
SQL> SELECT cust_id, cust_last_name
FROM customers
WHERE cust_credit_limit IN
(select cust_credit_limit
FROM customers
WHERE cust_city ='Singapore');
```

Which statement is true regarding the above query if one of the values generated by the subquery is NULL?

- A. It produces an error.
- B. It executes but returns no rows.
- C. It generates output for NULL as well as the other values produced by the subquery.
- D. It ignores the NULL value and generates output for the other values produced by the subquery.

Question: 14

View the Exhibit and examine the structure of the PRODUCTS table.

You need to generate a report in the following format:

CATEGORIES

5MP Digital Photo Camera's category is Photo

Y Box's category is Electronics

Envoy Ambassador's category is Hardware

Which two queries would give the required output? (Choose two.)

- A. SELECT prod_name || q"'s category is ' || prod_category CATEGORIES
FROM products;
- B. SELECT prod_name || q['s]category is ' || prod_category CATEGORIES
FROM products;
- C. SELECT prod_name || q\'s\' || ' category is ' || prod_category CATEGORIES
FROM products;
- D. SELECT prod_name || q'<s >' || 'category is ' || prod_category CATEGORIES
FROM products;

Question: 15

The PART_CODE column in the SPARES table contains the following list of values:

PART_CODE

A%_WQ123

A%BWQ123

AB_WQ123

Evaluate the following query:

SQL> SELECT part_code

FROM spares

WHERE part_code LIKE '%\%_WQ12%' ESCAPE '\';

Which statement is true regarding the outcome of the above query?

A. It produces an error.

B. It displays all values.

C. It displays only the values A%_WQ123 and AB_WQ123.

D. It displays only the values A%_WQ123 and A%BWQ123.

E. It displays only the values A%BWQ123 and AB_WQ123.

Question: 16

When does a transaction complete? (Choose all that apply.)

A. when a DELETE statement is executed

B. when a ROLLBACK command is executed

C. when a PL/SQL anonymous block is executed

D. when a data definition language (DDL) statement is executed

E. when a TRUNCATE statement is executed after the pending transaction

Question: 17

Which two statements are true regarding single row functions? (Choose two.)

A. They accept only a single argument.

B. They can be nested only to two levels.

C. Arguments can only be column values or constants.

D. They always return a single result row for every row of a queried table.

E. They can return a data type value different from the one that is referenced.

Question: 18

View the Exhibit to examine the description for the SALES and PRODUCTS tables.

You want to create a SALE_PROD view by executing the following SQL statement:

CREATE VIEW sale_prod

AS SELECT p.prod_id, cust_id, SUM(quantity_sold) "Quantity", SUM(prod_list_price) "Price"

FROM products p, sales s

WHERE p.prod_id=s.prod_id

GROUP BY p.prod_id, cust_id;

Which statement is true regarding the execution of the above statement?

A. The view will be created and you can perform DML operations on the view.

B. The view will be created but no DML operations will be allowed on the view.

C. The view will not be created because the join statements are not allowed for creating a view.

D. The view will not be created because the GROUP BY clause is not allowed for creating a view.

Question: 19

View the Exhibit and examine the description for the CUSTOMERS table.

You want to update the CUST_INCOME_LEVEL and CUST_CREDIT_LIMIT columns for the customer with the CUST_ID 2360. You want the value for the CUST_INCOME_LEVEL to have the same value as that of the customer with the CUST_ID 2560 and the CUST_CREDIT_LIMIT to have the same value as that of the customer with CUST_ID 2566.

Which UPDATE statement will accomplish the task?

A. UPDATE customers

SET cust_income_level = (SELECT cust_income_level

FROM customers

WHERE cust_id = 2560),

cust_credit_limit = (SELECT cust_credit_limit

FROM customers

WHERE cust_id = 2566)

WHERE cust_id=2360;

B. UPDATE customers

SET (cust_income_level,cust_credit_limit) = (SELECT

cust_income_level, cust_credit_limit

FROM customers
 WHERE cust_id=2560 OR cust_id=2566)
 WHERE cust_id=2360;
 C. UPDATE customers
 SET (cust_income_level,cust_credit_limit) = (SELECT
 cust_income_level, cust_credit_limit
 FROM customers
 WHERE cust_id IN(2560, 2566)
 WHERE cust_id=2360;
 D. UPDATE customers
 SET (cust_income_level,cust_credit_limit) = (SELECT
 cust_income_level, cust_credit_limit
 FROM customers
 WHERE cust_id=2560 AND cust_id=2566)
 WHERE cust_id=2360;

Question: 20

View the Exhibit and examine the structure of the PROMOTIONS table.

Evaluate the following SQL statement:

```
SQL>SELECT promo_category, AVG(promo_cost) Avg_Cost, AVG(promo_cost)*.25
Avg_Overhead
FROM promotions
WHERE UPPER(promo_category) IN ('TV', 'INTERNET','POST') GROUP BY Avg_Cost ORDER
BY
Avg_Overhead;
```

The above query generates an error on execution. Which clause in the above SQL statement causes the error?

A. WHERE
 B. SELECT
 C. GROUP BY
 D. ORDER BY

Question: 21

Which statement is true regarding subqueries?

- A. The LIKE operator cannot be used with single-row subqueries.
- B. The NOT IN operator is equivalent to IS NULL with single-row subqueries.
- C. =ANY and =ALL operators have the same functionality in multiple-row subqueries.
- D. The NOT operator can be used with IN, ANY, and ALL operators in multiple-row subqueries.

Question: 22

View the Exhibits and examine the structures of the PRODUCTS, SALES, and CUSTOMERS tables.

You need to generate a report that gives details of the customer's last name, name of the product, and the quantity sold for all customers in 'Tokyo'.

Which two queries give the required result? (Choose two.)

- A.

```
SELECT c.cust_last_name,p.prod_name, s.quantity_sold
FROM sales s JOIN products p
USING(prod_id)
JOIN customers c
USING(cust_id)
WHERE c.cust_city='Tokyo';
```
- B.

```
SELECT c.cust_last_name, p.prod_name, s.quantity_sold
FROM products p JOIN sales s JOIN customers c
ON(p.prod_id=s.prod_id)
ON(s.cust_id=c.cust_id)
WHERE c.cust_city='Tokyo';
```
- C.

```
SELECT c.cust_last_name, p.prod_name, s.quantity_sold
FROM products p JOIN sales s
ON(p.prod_id=s.prod_id)
JOIN customers c
ON(s.cust_id=c.cust_id)
AND c.cust_city='Tokyo';
```
- D.

```
SELECT c.cust_id,c.cust_last_name,p.prod_id, p.prod_name, s.quantity_sold
FROM products p JOIN sales s
```

```
USING(prod_id)
JOIN customers c
USING(cust_id)
WHERE c.cust_city='Tokyo';
```

Question: 23

View the Exhibit and examine the structure of the CUSTOMERS table.

Which statement would display the highest credit limit available in each income level in each city in the CUSTOMERS table?

- A. SELECT cust_city, cust_income_level, MAX(cust_credit_limit)
FROM customers
GROUP BY cust_city, cust_income_level, cust_credit_limit;
- B. SELECT cust_city, cust_income_level, MAX(cust_credit_limit)
FROM customers
GROUP BY cust_city, cust_income_level;
- C. SELECT cust_city, cust_income_level, MAX(cust_credit_limit)
FROM customers
GROUP BY cust_credit_limit, cust_income_level, cust_city;
- D. SELECT cust_city, cust_income_level, MAX(cust_credit_limit)
FROM customers
GROUP BY cust_city, cust_income_level, MAX (cust_credit_limit);

Question: 24

Which CREATE TABLE statement is valid?

- A. CREATE TABLE ord_details
(ord_no NUMBER(2) PRIMARY KEY,
item_no NUMBER(3) PRIMARY KEY,
ord_date DATE NOT NULL);
- B. CREATE TABLE ord_details
(ord_no NUMBER(2) UNIQUE, NOT NULL,
item_no NUMBER(3),
ord_date DATE DEFAULT SYSDATE NOT NULL);
- C. CREATE TABLE ord_details
(ord_no NUMBER(2) ,
item_no NUMBER(3),
ord_date DATE DEFAULT NOT NULL,
CONSTRAINT ord_uq UNIQUE (ord_no),
CONSTRAINT ord_pk PRIMARY KEY (ord_no));
- D. CREATE TABLE ord_details
(ord_no NUMBER(2),
item_no NUMBER(3),
ord_date DATE DEFAULT SYSDATE NOT NULL,
CONSTRAINT ord_pk PRIMARY KEY (ord_no, item_no));

Question: 25

Evaluate the following SQL statement:

```
SQL> SELECT cust_id, cust_last_name "Last Name"
FROM customers
WHERE country_id = 10
UNION
```

```
SELECT cust_id CUST_NO, cust_last_name
FROM customers
WHERE country_id = 30;
```

Which ORDER BY clauses are valid for the above query? (Choose all that apply.)

- A. ORDER BY 2,1
- B. ORDER BY CUST_NO
- C. ORDER BY 2,cust_id
- D. ORDER BY "CUST_NO"
- E. ORDER BY "Last Name"

Question: 26

Which is the valid CREATE TABLE statement?

- A. CREATE TABLE emp9\$# (emp_no NUMBER(4));

- B. CREATE TABLE 9emp\$# (emp_no NUMBER(4));
- C. CREATE TABLE emp*123 (emp_no NUMBER(4));
- D. CREATE TABLE emp9\$# (emp_no NUMBER(4), date DATE);

Question: 27

The SQL statements executed in a user session are as follows:

```
SQL> CREATE TABLE product
(pcode NUMBER(2),
pname VARCHAR2(10));
SQL> INSERT INTO product VALUES (1, 'pen');
SQL> INSERT INTO product VALUES (2, 'pencil');
SQL> SAVEPOINT a;
SQL> UPDATE product SET pcode = 10 WHERE pcode = 1;
SQL> SAVEPOINT b;
SQL> DELETE FROM product WHERE pcode = 2;
SQL> COMMIT; SQL> DELETE FROM product WHERE pcode=10;
```

Which two statements describe the consequences of issuing the ROLLBACK TO SAVE POINT a command in the session? (Choose two.)

- A. The rollback generates an error.
- B. No SQL statements are rolled back.
- C. Only the DELETE statements are rolled back.
- D. Only the second DELETE statement is rolled back.
- E. Both the DELETE statements and the UPDATE statement are rolled back.

Question: 28

View the Exhibit and examine the description of SALES and PROMOTIONS tables. You want to delete rows from the SALES table, where the PROMO_NAME column in the PROMOTIONS table has either blowout sale or everyday low price as values. Which DELETE statements are valid? (Choose all that apply.)

- A. DELETE
FROM sales
WHERE promo_id = (SELECT promo_id
FROM promotions
WHERE promo_name = 'blowout sale')
AND promo_id = (SELECT promo_id
FROM promotions
WHERE promo_name = 'everyday low price');
- B. DELETE
FROM sales
WHERE promo_id = (SELECT promo_id
FROM promotions
WHERE promo_name = 'blowout sale')
OR promo_id = (SELECT promo_id
FROM promotions
WHERE promo_name = 'everyday low price');
- C. DELETE
FROM sales
WHERE promo_id IN (SELECT promo_id
FROM promotions
WHERE promo_name = 'blowout sale'
OR promo_name = 'everyday low price');
- D. DELETE
FROM sales
WHERE promo_id IN (SELECT promo_id
FROM promotions
WHERE promo_name IN ('blowout sale', 'everyday low price'));

Question: 29

View the Exhibit to examine the description for the SALES table.

Which views can have all DML operations performed on it? (Choose all that apply.)

- A. CREATE VIEW v3
AS SELECT * FROM SALES
WHERE cust_id = 2034

```

WITH CHECK OPTION;
B. CREATE VIEW v1
AS SELECT * FROM SALES
WHERE time_id <= SYSDATE - 2*365
WITH CHECK OPTION;
C. CREATE VIEW v2
AS SELECT prod_id, cust_id, time_id FROM SALES
WHERE time_id <= SYSDATE - 2*365
WITH CHECK OPTION;
D. CREATE VIEW v4
AS SELECT prod_id, cust_id, SUM(quantity_sold) FROM SALES
WHERE time_id <= SYSDATE - 2*365
GROUP BY prod_id, cust_id
WITH CHECK OPTION;

```

Question: 30

View the Exhibit and examine the structure of ORDERS and CUSTOMERS tables. There is only one customer with the cust_last_name column having value Roberts. Which INSERT statement should be used to add a row into the ORDERS table for the customer whose CUST_LAST_NAME is Roberts and CREDIT_LIMIT is 600?

```

A. INSERT INTO orders
VALUES (1,'10-mar-2007', 'direct',
(SELECT customer_id
FROM customers
WHERE cust_last_name='Roberts' AND
credit_limit=600), 1000);
B. INSERT INTO orders (order_id,order_date,order_mode,
(SELECT customer_id
FROM customers
WHERE cust_last_name='Roberts' AND
credit_limit=600),order_total)
VALUES(1,'10-mar-2007', 'direct', &&customer_id, 1000);
C. INSERT INTO(SELECT o.order_id, o.order_date,o.order_mode,c.customer_id, o.order_total
FROM orders o, customers c
WHERE o.customer_id = c.customer_id
AND c.cust_last_name='Roberts' ANDc.credit_limit=600 )
VALUES (1,'10-mar-2007', 'direct',(SELECT customer_id
FROM customers
WHERE cust_last_name='Roberts' AND
credit_limit=600), 1000);
D. INSERT INTO orders (order_id,order_date,order_mode,
(SELECT customer_id
FROM customers
WHERE cust_last_name='Roberts' AND
credit_limit=600),order_total)
VALUES(1,'10-mar-2007', 'direct', &customer_id, 1000);

```

Question: 31

Evaluate the following command:

```

CREATE TABLE employees
(employee_id NUMBER(2) PRIMARY KEY,
last_name VARCHAR2(25) NOT NULL,
department_id NUMBER(2)NOT NULL,
job_id VARCHAR2(8),
salary NUMBER(10,2));

```

You issue the following command to create a view that displays the IDs and last names of the sales staff in the organization:

```

CREATE OR REPLACE VIEW sales_staff_vu AS
SELECT employee_id,
last_name,job_id
FROM employees

```

WHERE job_id LIKE 'SA_%' WITH CHECK OPTION;

Which two statements are true regarding the above view? (Choose two.)

- A. It allows you to insert rows into the EMPLOYEES table.
- B. It allows you to delete details of the existing sales staff from the EMPLOYEES table.
- C. It allows you to update job IDs of the existing sales staff to any other job ID in the EMPLOYEES table.
- D. It allows you to insert IDs, last names, and job IDs of the sales staff from the view if it is used in multitable INSERT statements.

Question: 32

View the Exhibit and examine the structure of the SALES, CUSTOMERS, PRODUCTS, and TIMES tables. The PROD_ID column is the foreign key in the SALES table, which references the PRODUCTS table. Similarly, the CUST_ID and TIME_ID columns are also foreign keys in the SALES table referencing the CUSTOMERS and TIMES tables, respectively.

Evaluate the following CREATE TABLE command:

```
CREATE TABLE new_sales(prod_id, cust_id, order_date DEFAULT SYSDATE)
AS SELECT prod_id, cust_id, time_id
FROM sales;
```

Which statement is true regarding the above command?

- A. The NEW_SALES table would not get created because the DEFAULT value cannot be specified in the column definition.
- B. The NEW_SALES table would get created and all the NOT NULL constraints defined on the specified columns would be passed to the new table.
- C. The NEW_SALES table would not get created because the column names in the CREATE TABLE command and the SELECT clause do not match.
- D. The NEW_SALES table would get created and all the FOREIGN KEY constraints defined on the specified columns would be passed to the new table.

Question: 33

View the Exhibit and examine the structure of the CUSTOMERS table.

Evaluate the following SQL statement:

```
SQL> SELECT cust_city, COUNT(cust_last_name)
FROM customers
WHERE cust_credit_limit > 1000
GROUP BY cust_city
HAVING AVG(cust_credit_limit) BETWEEN 5000 AND 6000;
```

Which statement is true regarding the outcome of the above query?

- A. It executes successfully.
- B. It returns an error because the BETWEEN operator cannot be used in the HAVING clause.
- C. It returns an error because WHERE and HAVING clauses cannot be used in the same SELECT statement.
- D. It returns an error because WHERE and HAVING clauses cannot be used to apply conditions on the same column.

Question: 34

The following data exists in the PRODUCTS table:

```
PROD_ID PROD_LIST_PRICE
```

```
-----
123456 152525.99
```

You issue the following query:

```
SQL> SELECT RPAD((ROUND(prod_list_price)), 10, '*')
FROM products
WHERE prod_id = 123456;
```

What would be the outcome?

- A. 152526****
- B. **152525.99
- C. 152525**
- D. an error message

Question: 35

View the Exhibit and examine the structure of the PROMOTIONS table.

Examine the following two SQL statements:

Statement 1

```
SQL>SELECT promo_category,SUM(promo_cost)
FROM promotions
```

WHERE promo_end_date-promo_begin_date > 30

GROUP BY promo_category;

Statement 2

SQL>SELECT promo_category,sum(promo_cost)

FROM promotions

GROUP BY promo_category

HAVING MIN(promo_end_date-promo_begin_date)>30;

Which statement is true regarding the above two SQL statements?

- A. statement 1 gives an error, statement 2 executes successfully
- B. statement 2 gives an error, statement 1 executes successfully
- C. statement 1 and statement 2 execute successfully and give the same output
- D. statement 1 and statement 2 execute successfully and give a different output

Question: 36

Examine the structure and data of the CUST_TRANS table:

CUST_TRANS

Name Null? Type

CUSTNO NOT NULL CHAR(2)

TRANSDATE DATE

TRANSAMT NUMBER(6,2)

CUSTNO TRANSDATE TRANSAMT

11 01-JAN-07 1000

22 01-FEB-07 2000

33 01-MAR-07 3000

Dates are stored in the default date format dd-mon-rr in the CUST_TRANS table.

Which three SQL statements would execute successfully? (Choose three.)

- A. SELECT transdate + '10' FROM cust_trans;
- B. SELECT * FROM cust_trans WHERE transdate = '01-01-07';
- C. SELECT transamt FROM cust_trans WHERE custno > '11';
- D. SELECT * FROM cust_trans WHERE transdate='01-JANUARY-07';
- E. SELECT custno + 'A' FROM cust_trans WHERE transamt > 2000;

Question: 37

View the Exhibit and examine the structure of the PROMOTIONS table.

You have to generate a report that displays the promo name and start date for all promos that started after the last promo in the 'INTERNET' category.

Which query would give you the required output?

- A. SELECT promo_name, promo_begin_date FROM promotions
WHERE promo_begin_date > ALL (SELECT MAX(promo_begin_date)
FROM promotions)AND
promo_category = 'INTERNET';
- B. SELECT promo_name, promo_begin_date FROM promotions
WHERE promo_begin_date IN (SELECT promo_begin_date
FROM promotions
WHERE promo_category='INTERNET');
- C. SELECT promo_name, promo_begin_date FROM promotions
WHERE promo_begin_date > ALL (SELECT promo_begin_date
FROM promotions
WHERE promo_category = 'INTERNET');
- D. SELECT promo_name, promo_begin_date FROM promotions
WHERE promo_begin_date > ANY (SELECT promo_begin_date
FROM promotions
WHERE promo_category = 'INTERNET');

Question: 38

View the Exhibit and examine the structure of the PRODUCTS table.

Evaluate the following query:

SQL> SELECT prod_name

FROM products

WHERE prod_id IN (SELECT prod_id FROM products

WHERE prod_list_price =

```
(SELECT MAX(prod_list_price)FROM products
WHERE prod_list_price <
(SELECT MAX(prod_list_price)FROM products));
```

What would be the outcome of executing the above SQL statement?

- A. It produces an error.
- B. It shows the names of all products in the table.
- C. It shows the names of products whose list price is the second highest in the table.
- D. It shows the names of all products whose list price is less than the maximum list price.

Question: 39

View the Exhibit and examine the data in the COSTS table.

You need to generate a report that displays the IDs of all products in the COSTS table whose unit price is at least 25% more than the unit cost. The details should be displayed in the descending order of 25% of the unit cost.

You issue the following query:

```
SQL>SELECT prod_id
FROM costs
WHERE unit_price >= unit_cost * 1.25
ORDER BY unit_cost * 0.25 DESC;
```

Which statement is true regarding the above query?

- A. It executes and produces the required result.
- B. It produces an error because an expression cannot be used in the ORDER BY clause.
- C. It produces an error because the DESC option cannot be used with an expression in the ORDER BY clause.
- D. It produces an error because the expression in the ORDER BY clause should also be specified in the SELECT clause.

Question: 40

Which two statements are true regarding subqueries? (Choose two.)

- A. A subquery can retrieve zero or more rows.
- B. Only two subqueries can be placed at one level.
- C. A subquery can be used only in SQL query statements.
- D. A subquery can appear on either side of a comparison operator.
- E. There is no limit on the number of subquery levels in the WHERE clause of a SELECT statement.

Question: 41

View the Exhibit and examine the data in the PRODUCTS table.

You need to display product names from the PRODUCTS table that belong to the 'Software/Other' category with minimum prices as either \$2000 or \$4000 and no unit of measure.

You issue the following query:

```
SQL>SELECT prod_name, prod_category, prod_min_price
FROM products
WHERE prod_category LIKE '%Other%' AND (prod_min_price = 2000 OR
prod_min_price = 4000) AND prod_unit_of_measure <> '';
```

Which statement is true regarding the above query?

- A. It executes successfully but returns no result.
- B. It executes successfully and returns the required result.
- C. It generates an error because the condition specified for PROD_UNIT_OF_MEASURE is not valid.
- D. It generates an error because the condition specified for the PROD_CATEGORY column is not valid.

Question: 42

You need to calculate the number of days from 1st January 2007 till date .

Dates are stored in the default format of dd-mon-rr.

Which two SQL statements would give the required output? (Choose two.)

- A. SELECT SYSDATE - '01-JAN-2007' FROM DUAL;
- B. SELECT SYSDATE - TO_DATE('01/JANUARY/2007') FROM DUAL;
- C. SELECT SYSDATE - TO_DATE('01-JANUARY-2007') FROM DUAL;
- D. SELECT TO_CHAR(SYSDATE, 'DD-MON-YYYY') - '01-JAN-2007' FROM DUAL;
- E. SELECT TO_DATE(SYSDATE, 'DD/MONTH/YYYY') - '01/JANUARY/2007' FROM DUAL;

Question: 43

You need to generate a list of all customer last names with their credit limits from the CUSTOMERS table. Those customers who do not have a credit limit should appear last in the list. Which two queries would achieve the required result? (Choose two.)

- A. SELECT cust_last_name, cust_credit_limit
FROM customers
ORDER BY cust_credit_limit DESC;
- B. SELECT cust_last_name, cust_credit_limit
FROM customers
ORDER BY cust_credit_limit;
- C. SELECT cust_last_name, cust_credit_limit
FROM customers
ORDER BY cust_credit_limit NULLS LAST;
- D. SELECT cust_last_name, cust_credit_limit
FROM customers
ORDER BY cust_last_name, cust_credit_limit NULLS LAST;

Question: 44

View the Exhibit and examine the structure of the ORD table.

Evaluate the following SQL statements that are executed in a user session in the specified order:

```
CREATE SEQUENCE ord_seq;
SELECT ord_seq.nextval
FROM dual;
INSERT INTO ord
VALUES (ord_seq.CURRVAL, '25-jan-2007',101);
UPDATE ord
SET ord_no= ord_seq.NEXTVAL
WHERE cust_id =101;
```

What would be the outcome of the above statements?

- A. All the statements would execute successfully and the ORD_NO column would contain the value 2 for the CUST_ID 101.
- B. The CREATE SEQUENCE command would not execute because the minimum value and maximum value for the sequence have not been specified.
- C. The CREATE SEQUENCE command would not execute because the starting value of the sequence and the increment value have not been specified.
- D. All the statements would execute successfully and the ORD_NO column would have the value 20 for the CUST_ID 101 because the default CACHE value is 20.

Question: 45

View the Exhibit for the structure of the STUDENT and FACULTY tables.

You need to display the faculty name followed by the number of students handled by the faculty at the base location. Examine the following two SQL statements:

Statement 1

```
SQL>SELECT faculty_name,COUNT(student_id)
FROM student JOIN faculty
USING (faculty_id, location_id)
GROUP BY faculty_name;
```

Statement 2

```
SQL>SELECT faculty_name,COUNT(student_id)
FROM student NATURAL JOIN faculty
GROUP BY faculty_name;
```

Which statement is true regarding the outcome?

- A. Only statement 1 executes successfully and gives the required result.
- B. Only statement 2 executes successfully and gives the required result.
- C. Both statements 1 and 2 execute successfully and give different results.
- D. Both statements 1 and 2 execute successfully and give the same required result.

Question: 46

View the Exhibit and examine the structure of the PRODUCTS table.

Using the PRODUCTS table, you issue the following query to generate the names, current list price, and discounted list price for all those products whose list price falls below \$10 after a discount of 25% is applied on it.

```
SQL>SELECT prod_name, prod_list_price,
```



```
prod_list_price - (prod_list_price * .25) "DISCOUNTED_PRICE"
```

```
FROM products
```

```
WHERE discounted_price < 10;
```

The query generates an error.

What is the reason for the error?

A. The parenthesis should be added to enclose the entire expression.

B. The double quotation marks should be removed from the column alias.

C. The column alias should be replaced with the expression in the WHERE clause.

D. The column alias should be put in uppercase and enclosed within double quotation marks in the WHERE clause.

Question: 47

You created an ORDERS table with the following description:

Name Null Type

ORD_ID NOT NULL NUMBER(2)

CUST_ID NOT NULL NUMBER(3)

ORD_DATE NOT NULL DATE

ORD_AMOUNT NOT NULL NUMBER (10,2)

You inserted some rows in the table. After some time, you want to alter the table by creating the PRIMARY KEY constraint on the ORD_ID column.

Which statement is true in this scenario?

A. You cannot have two constraints on one column.

B. You cannot add a primary key constraint if data exists in the column.

C. The primary key constraint can be created only at the time of table creation.

D. You can add the primary key constraint even if data exists, provided that there are no duplicate values.

Question: 48

View the Exhibit and examine the structure of ORD and ORD_ITEMS tables.

The ORD_NO column is PRIMARY KEY in the ORD table and the ORD_NO and ITEM_NO columns are composite PRIMARY KEY in the ORD_ITEMS table.

Which two CREATE INDEX statements are valid? (Choose two.)

A. CREATE INDEX ord_idx1

ON ord(ord_no);

B. CREATE INDEX ord_idx2

ON ord_items(ord_no);

C. CREATE INDEX ord_idx3

ON ord_items(item_no);

D. CREATE INDEX ord_idx4

ON ord,ord_items(ord_no, ord_date,qty);

Question: 49

View the Exhibit and examine the structure of the PROMOTIONS table. Using the PROMOTIONS table, you need to find out the names and cost of all the promos done on 'TV' and 'internet' that ended in the time interval 15th March '00 to 15th October '00.

Which two queries would give the required result? (Choose two.)

A. SELECT promo_name, promo_cost

FROM promotions

WHERE promo_category IN ('TV', 'internet') AND
promo_end_date BETWEEN '15-MAR-00' AND '15-OCT-00';

B. SELECT promo_name, promo_cost

FROM promotions

WHERE promo_category = 'TV' OR promo_category = 'internet' AND
promo_end_date >='15-MAR-00' OR promo_end_date <='15-OCT-00';

C. SELECT promo_name, promo_cost

FROM promotions WHERE (promo_category BETWEEN 'TV' AND 'internet') AND
(promo_end_date IN ('15-MAR-00','15-OCT-00'));

D. SELECT promo_name, promo_cost

FROM promotions WHERE (promo_category = 'TV' OR promo_category = 'internet') AND
(promo_end_date >='15-MAR-00' AND promo_end_date <='15-OCT-00');

Question: 50

You need to display the date 11-oct-2007 in words as 'Eleventh of October, Two Thousand Seven'. Which SQL statement would give the required result?

- A. SELECT TO_CHAR('11-oct-2007', 'fmDdspth "of" Month, Year')
FROM DUAL;
- B. SELECT TO_CHAR(TO_DATE('11-oct-2007'), 'fmDdspth of month, year')
FROM DUAL;
- C. SELECT TO_CHAR(TO_DATE('11-oct-2007'), 'fmDdthsp "of" Month, Year')
FROM DUAL;
- D. SELECT TO_DATE(TO_CHAR('11-oct-2007', 'fmDdspth "of" Month, Year'))
FROM DUAL;

Question: 51

You need to create a table for a banking application. One of the columns in the table has the following requirements:

- 1) You want a column in the table to store the duration of the credit period.
- 2) The data in the column should be stored in a format such that it can be easily added and subtracted with DATE data type without using conversion functions.
- 3) The maximum period of the credit provision in the application is 30 days.
- 4) The interest has to be calculated for the number of days an individual has taken a credit for.

Which data type would you use for such a column in the table?

- A. DATE
- B. NUMBER
- C. TIMESTAMP
- D. INTERVAL DAY TO SECOND
- E. INTERVAL YEAR TO MONTH

Question: 52

View the Exhibit and examine the data in the CUSTOMERS table.

Evaluate the following query:

```
SQL> SELECT cust_name AS "NAME", cust_credit_limit/2 AS MIDPOINT,  
MIDPOINT+100 AS "MAX LOWER LIMIT"  
FROM customers;
```

The above query produces an error on execution.

What is the reason for the error?

- A. An alias cannot be used in an expression.
- B. The alias NAME should not be enclosed within double quotation marks.
- C. The MIDPOINT+100 expression gives an error because CUST_CREDIT_LIMIT contains NULL values.
- D. The alias MIDPOINT should be enclosed within double quotation marks for the CUST_CREDIT_LIMIT/2 expression.

Question: 53

Which statements are correct regarding indexes? (Choose all that apply.)

- A. When a table is dropped, the corresponding indexes are automatically dropped.
- B. A FOREIGN KEY constraint on a column in a table automatically creates a nonunique index.
- C. A nondeferrable PRIMARY KEY or UNIQUE KEY constraint in a table automatically creates a unique index.
- D. For each data manipulation language (DML) operation performed, the corresponding indexes are automatically updated.

Question: 54

View the Exhibit and examine the structure of the PRODUCTS table.

All products have a list price.

You issue the following command to display the total price of each product after a discount of 25% and a

tax of 15% are applied on it. Freight charges of \$100 have to be applied to all the products.

```
SQL> SELECT prod_name, prod_list_price -(prod_list_price*(25/100))  
+(prod_list_price -(prod_list_price*(25/100))*(15/100))+100  
AS "TOTAL PRICE"
```

FROM products;

What would be the outcome if all the parentheses are removed from the above statement?

- A. It produces a syntax error.
- B. The result remains unchanged.

- C. The total price value would be lower than the correct value.
- D. The total price value would be higher than the correct value.

Question: 55

Which two statements are true regarding single row functions? (Choose two.)

- A. They accept only a single argument.
- B. They can be nested only to two levels.
- C. Arguments can only be column values or constants.
- D. They always return a single result row for every row of a queried table.
- E. They can return a data type value different from the one that is referenced.

Question: 56

View the Exhibit and examine the structure of the PROMOTIONS table.

Using the PROMOTIONS table, you need to find out the average cost for all promos in the ranges \$0-2000 and \$2000-5000 in category A.

You issue the following SQL statement:

```
SQL>SELECT AVG(CASE
WHEN promo_cost BETWEEN 0 AND 2000 AND promo_category='A'
THEN promo_cost
ELSE null END) "CAT_2000A",
AVG(CASE
WHEN promo_cost BETWEEN 2001 AND 5000 AND promo_category='A'
THEN promo_cost
ELSE null END) "CAT_5000A"
FROM promotions;
```

What would be the outcome?

- A. It executes successfully and gives the required result.
- B. It generates an error because NULL cannot be specified as a return value.
- C. It generates an error because CASE cannot be used with group functions.
- D. It generates an error because multiple conditions cannot be specified for the WHEN clause.

Question: 57

Which two statements are true regarding constraints? (Choose two.)

- A. A foreign key cannot contain NULL values.
- B. A column with the UNIQUE constraint can contain NULL values.
- C. A constraint is enforced only for the INSERT operation on a table.
- D. A constraint can be disabled even if the constraint column contains data.
- E. All constraints can be defined at the column level as well as the table level.

Question: 58

Evaluate the following query:

```
SQL> SELECT promo_name || q's start date was ' || promo_begin_date
AS "Promotion Launches"
FROM promotions;
```

What would be the outcome of the above query?

- A. It produces an error because flower braces have been used.
- B. It produces an error because the data types are not matching.
- C. It executes successfully and introduces an 's at the end of each promo_name in the output.
- D. It executes successfully and displays the literal " {s start date was } " for each row in the output.

Question: 59

View the Exhibit and examine the structure of the PROMOTIONS table.

Examine the following two SQL statements:

Statement 1

```
SQL>SELECT promo_category,SUM(promo_cost)
FROM promotions
WHERE promo_end_date-promo_begin_date > 30
GROUP BY promo_category;
```

Statement 2

```
SQL>SELECT promo_category,sum(promo_cost)
FROM promotions
GROUP BY promo_category
```

HAVING MIN(promo_end_date-promo_begin_date)>30;

Which statement is true regarding the above two SQL statements?

- A. statement 1 gives an error, statement 2 executes successfully
- B. statement 2 gives an error, statement 1 executes successfully
- C. statement 1 and statement 2 execute successfully and give the same output
- D. statement 1 and statement 2 execute successfully and give a different output

Question: 60

Evaluate the following query:

```
SELECT INTERVAL '300' MONTH,  
INTERVAL '54-2' YEAR TO MONTH,  
INTERVAL '11:12:10.1234567' HOUR TO SECOND  
FROM dual;
```

What is the correct output of the above query?

- A. +25-00 , +54-02, +00 11:12:10.123457
- B. +00-300, +54-02, +00 11:12:10.123457
- C. +25-00 , +00-650, +00 11:12:10.123457
- D. +00-300 , +00-650, +00 11:12:10.123457

Question: 61

You issued the following command to drop the PRODUCTS table:

```
SQL> DROP TABLE products;
```

What is the implication of this command? (Choose all that apply.)

- A. All data along with the table structure is deleted.
- B. The pending transaction in the session is committed.
- C. All indexes on the table will remain but they are invalidated.
- D. All views and synonyms will remain but they are invalidated.
- E. All data in the table are deleted but the table structure will remain.

Question: 62

View the Exhibit and examine the structure of the CUSTOMERS table.

NEW_CUSTOMERS is a new table with the columns CUST_ID, CUST_NAME and CUST_CITY that have the same data types and size as the corresponding columns in the CUSTOMERS table.

Evaluate the following INSERT statement:

```
INSERT INTO new_customers (cust_id, cust_name, cust_city) VALUES(SELECT  
cust_id,cust_first_name||' '||cust_last_name,cust_city  
FROM customers  
WHERE cust_id > 23004);
```

The INSERT statement fails when executed. What could be the reason?

- A. The VALUES clause cannot be used in an INSERT with a subquery.
- B. Column names in the NEW_CUSTOMERS and CUSTOMERS tables do not match.
- C. The WHERE clause cannot be used in a subquery embedded in an INSERT statement.
- D. The total number of columns in the NEW_CUSTOMERS table does not match the total number of columns in the CUSTOMERS table.

Question: 63

View the Exhibit and examine the structure of the PROMOTIONS table.

Using the PROMOTIONS table, you need to display the names of all promos done after January 1, 2001, starting with the latest promo.

Which query would give the required result? (Choose all that apply.)

- A. SELECT promo_name, promo_begin_date
FROM promotions
WHERE promo_begin_date > '01-JAN-01'
ORDER BY 2 DESC;
- B. SELECT promo_name, promo_begin_date
FROM promotions
WHERE promo_begin_date > '01-JAN-01'
ORDER BY promo_name DESC;
- C. SELECT promo_name, promo_begin_date
FROM promotions
WHERE promo_begin_date > '01-JAN-01'
ORDER BY 1 DESC;
- D. SELECT promo_name, promo_begin_date "START DATE"

```
FROM promotions
WHERE promo_begin_date > '01-JAN-01'
ORDER BY "START DATE" DESC;
```

Question: 64

View the Exhibit and examine the structure and data in the INVOICE table.
Which two SQL statements would execute successfully? (Choose two.)

- A. SELECT AVG(inv_date)
FROM invoice;
- B. SELECT MAX(inv_date),MIN(cust_id)
FROM invoice;
- C. SELECT MAX(AVG(SYSDATE - inv_date))
FROM invoice;
- D. SELECT AVG(inv_date - SYSDATE), AVG(inv_amt)
FROM invoice;

Question: 65

View the Exhibit and examine the structure of the PROMOTIONS table.
You need to generate a report of all promos from the PROMOTIONS table based on the following conditions:

1. The promo name should not begin with 'T' or 'N'.
2. The promo should cost more than \$20000.
3. The promo should have ended after 1st January 2001.

Which WHERE clause would give the required result?

- A. WHERE promo_name NOT LIKE 'T%' OR promo_name NOT LIKE 'N%' AND promo_cost > 20000 AND promo_end_date > '1-JAN-01'
- B. WHERE (promo_name NOT LIKE 'T%' AND promo_name NOT LIKE 'N%')OR promo_cost > 20000 OR promo_end_date > '1-JAN-01'
- C. WHERE promo_name NOT LIKE 'T%' AND promo_name NOT LIKE 'N%' AND promo_cost > 20000 AND promo_end_date > '1-JAN-01'
- D. WHERE (promo_name NOT LIKE '%T%' OR promo_name NOT LIKE '%N%')
AND(promo_cost > 20000 AND promo_end_date > '1-JAN-01')

Question: 66

View the Exhibit and examine the structure of the SALES table.

The following query is written to retrieve all those product IDs from the SALES table that have more than 55000 sold and have been ordered more than 10 times.

```
SQL> SELECT prod_id
FROM sales
WHERE quantity_sold > 55000 AND COUNT(*)>10
GROUP BY prod_id HAVING COUNT(*)>10;
```

Which statement is true regarding this SQL statement?

- A. It executes successfully and generates the required result.
- B. It produces an error because COUNT(*) should be specified in the SELECT clause also.
- C. It produces an error because COUNT(*) should be only in the HAVING clause and not in the WHERE clause.
- D. It executes successfully but produces no result because COUNT(prod_id) should be used instead of COUNT(*)

Question: 67

You need to create a table with the following column specifications:

1. Employee ID (numeric data type) for each employee
2. Employee Name (character data type) that stores the employee name
3. Hire date, which stores the date of joining the organization for each employee
4. Status (character data type), that contains the value 'ACTIVE' if no data is entered
5. Resume (character large object [CLOB] data type), which contains the resume submitted by the employee

Which is the correct syntax to create this table?

- A. CREATE TABLE EMP_1
(emp_id NUMBER(4),
emp_name VARCHAR2(25),
start_date DATE,
e_status VARCHAR2(10) DEFAULT 'ACTIVE',

```

resume CLOB(200));
B. CREATE TABLE 1_EMP
(emp_id NUMBER(4),
emp_name VARCHAR2(25),
start_date DATE,
emp_status VARCHAR2(10) DEFAULT 'ACTIVE',
resume CLOB);
C. CREATE TABLE EMP_1
(emp_id NUMBER(4),
emp_name VARCHAR2(25),
start_date DATE,
emp_status VARCHAR2(10) DEFAULT "ACTIVE",
resume CLOB);
D. CREATE TABLE EMP_1
(emp_id NUMBER,
emp_name VARCHAR2(25),
start_date DATE,
emp_status VARCHAR2(10) DEFAULT 'ACTIVE',
resume CLOB);

```

Question: 68

Which statement is true regarding the default behavior of the ORDER BY clause?

- A. In a character sort, the values are case-sensitive.
- B. NULL values are not considered at all by the sort operation.
- C. Only those columns that are specified in the SELECT list can be used in the ORDER BY clause.
- D. Numeric values are displayed from the maximum to the minimum value if they have decimal positions.

Question: 69

You need to extract details of those products in the SALES table where the PROD_ID column contains the string '_D123'. Which WHERE clause could be used in the SELECT statement to get the required output?

- A. WHERE prod_id LIKE '%_D123%' ESCAPE '_'
- B. WHERE prod_id LIKE '%_D123%' ESCAPE '\'
- C. WHERE prod_id LIKE '%_D123%' ESCAPE '%_'
- D. WHERE prod_id LIKE '%_D123%' ESCAPE '_'

Question: 70

Evaluate the following DELETE statement:

```
DELETE FROM sales;
```

There are no other uncommitted transactions on the SALES table.

Which statement is true about the DELETE statement?

- A. It would not remove the rows if the table has a primary key.
- B. It removes all the rows as well as the structure of the table.
- C. It removes all the rows in the table and deleted rows can be rolled back.
- D. It removes all the rows in the table and deleted rows cannot be rolled back.

Question: 71

Which three statements are true about multiple-row subqueries? (Choose three.)

- A. They can contain a subquery within a subquery.
- B. They can return multiple columns as well as rows.
- C. They cannot contain a subquery within a subquery.
- D. They can return only one column but multiple rows.
- E. They can contain group functions and GROUP BY and HAVING clauses.
- F. They can contain group functions and the GROUP BY clause, but not the HAVING clause.

Question: 72

Examine the description of the EMP_DETAILS table given below:

```
NAME NULL TYPE
```

```

-----
EMP_ID NOT NULL NUMBER
EMP_NAME NOT NULL VARCHAR2 (40)

```


EMP_IMAGE LONG

Which two statements are true regarding SQL statements that can be executed on the EMP_DETAIL table? (Choose two.)

- A. An EMP_IMAGE column can be included in the GROUP BY clause.
- B. An EMP_IMAGE column cannot be included in the ORDER BY clause.
- C. You cannot add a new column to the table with LONG as the data type.
- D. You can alter the table to include the NOT NULL constraint on the EMP_IMAGE column.

Question: 73

View the Exhibits and examine PRODUCTS and SALES tables.

You issue the following query to display product name and the number of times the product has been sold:

```
SQL>SELECT p.prod_name, i.item_cnt  
FROM (SELECT prod_id, COUNT(*) item_cnt  
FROM sales  
GROUP BY prod_id) i RIGHT OUTER JOIN products p  
ON i.prod_id = p.prod_id;
```

What happens when the above statement is executed?

- A. The statement executes successfully and produces the required output.
- B. The statement produces an error because ITEM_CNT cannot be displayed in the outer query.
- C. The statement produces an error because a subquery in the FROM clause and outer-joins cannot be used together.
- D. The statement produces an error because the GROUP BY clause cannot be used in a subquery in the FROM clause.

Question: 74

Which two statements are true regarding the ORDER BY clause? (Choose two.)

- A. It is executed first in the query execution.
- B. It must be the last clause in the SELECT statement.
- C. It cannot be used in a SELECT statement containing a HAVING clause.
- D. You cannot specify a column name followed by an expression in this clause.
- E. You can specify a combination of numeric positions and column names in this clause.

Question: 75

Evaluate the following SQL statement:

```
SQL> SELECT promo_id, promo_category  
FROM promotions  
WHERE promo_category = 'Internet' ORDER BY 2 DESC  
UNION  
SELECT promo_id, promo_category  
FROM promotions  
WHERE promo_category = 'TV'  
UNION  
SELECT promo_id, promo_category  
FROM promotions  
WHERE promo_category = 'Radio';
```

Which statement is true regarding the outcome of the above query?

- A. It executes successfully and displays rows in the descending order of PROMO_CATEGORY.
- B. It produces an error because positional notation cannot be used in the ORDER BY clause with SET operators.
- C. It executes successfully but ignores the ORDER BY clause because it is not located at the end of the compound statement.
- D. It produces an error because the ORDER BY clause should appear only at the end of a compound query-that is, with the last SELECT statement.

Question: 76

View the Exhibit and examine the description for the CUSTOMERS table.

You want to update the CUST_CREDIT_LIMIT column to NULL for all the customers, where CUST_INCOME_LEVEL has NULL in the CUSTOMERS table. Which SQL statement will accomplish the task?

- A. UPDATE customers
SET cust_credit_limit = NULL
WHERE CUST_INCOME_LEVEL = NULL;

B. UPDATE customers
 SET cust_credit_limit = NULL
 WHERE cust_income_level IS NULL;
 C. UPDATE customers
 SET cust_credit_limit = TO_NUMBER(NULL)
 WHERE cust_income_level = TO_NUMBER(NULL);
 D. UPDATE customers
 SET cust_credit_limit = TO_NUMBER(' ',9999)
 WHERE cust_income_level IS NULL;

Question: 77

The CUSTOMERS table has the following structure:
 Name Null? Type

CUST_ID NOT NULL NUMBER
 CUST_FIRST_NAME NOT NULL VARCHAR2(20)
 CUST_LAST_NAME NOT NULL VARCHAR2(30)
 CUST_INCOME_LEVEL VARCHAR2(30)
 CUST_CREDIT_LIMIT NUMBER

You need to write a query that does the following tasks:

1. Display the first name and tax amount of the customers. Tax is 5% of their credit limit.
2. Only those customers whose income level has a value should be considered.
3. Customers whose tax amount is null should not be considered.

Which statement accomplishes all the required tasks?

A. SELECT cust_first_name, cust_credit_limit * .05 AS TAX_AMOUNT
 FROM customers
 WHERE cust_income_level IS NOT NULL AND
 tax_amount IS NOT NULL;
 B. SELECT cust_first_name, cust_credit_limit * .05 AS TAX_AMOUNT
 FROM customers
 WHERE cust_income_level IS NOT NULL AND
 cust_credit_limit IS NOT NULL;
 C. SELECT cust_first_name, cust_credit_limit * .05 AS TAX_AMOUNT
 FROM customers
 WHERE cust_income_level <> NULL AND
 tax_amount <> NULL;
 D. SELECT cust_first_name, cust_credit_limit * .05 AS TAX_AMOUNT
 FROM customers
 WHERE (cust_income_level,tax_amount) IS NOT NULL;

Question: 78

Which two statements are true regarding the USING clause in table joins?
 (Choose two.)

- A. It can be used to join a maximum of three tables.
- B. It can be used to restrict the number of columns used in a NATURAL join.
- C. It can be used to access data from tables through equijoins as well as nonequijoins.
- D. It can be used to join tables that have columns with the same name and compatible data types.

Question: 79

View the Exhibit and examine the data in the PROJ_TASK_DETAILS table.

The PROJ_TASK_DETAILS table stores information about tasks involved in a project and the relation between them.

The BASED_ON column indicates dependencies between tasks. Some tasks do not depend on the completion of any other tasks.

You need to generate a report showing all task IDs, the corresponding task ID they are dependent on, and the name of the employee in charge of the task it depends on.

Which query would give the required result?

A. SELECT p.task_id, p.based_on, d.task_in_charge
 FROM proj_task_details p JOIN proj_task_details d
 ON (p.based_on = d.task_id);
 B. SELECT p.task_id, p.based_on, d.task_in_charge
 FROM proj_task_details p LEFT OUTER JOIN proj_task_details d

ON (p.based_on = d.task_id);
C. SELECT p.task_id, p.based_on, d.task_in_charge
FROM proj_task_details p FULL OUTER JOIN proj_task_details d
ON (p.based_on = d.task_id);
D. SELECT p.task_id, p.based_on, d.task_in_charge
FROM proj_task_details p JOIN proj_task_details d
ON (p.task_id = d.task_id);

Question: 80

Which three statements/commands would cause a transaction to end? (Choose three.)

- A. COMMIT
- B. SELECT
- C. CREATE
- D. ROLLBACK
- E. SAVEPOINT

Question: 81

Which two statements are true regarding views? (Choose two.)

- A. A simple view in which column aliases have been used cannot be updated.
- B. Rows cannot be deleted through a view if the view definition contains the DISTINCT keyword.
- C. Rows added through a view are deleted from the table automatically when the view is dropped.
- D. The OR REPLACE option is used to change the definition of an existing view without dropping and re-creating it.
- E. The WITH CHECK OPTION constraint can be used in a view definition to restrict the columns displayed through the view.

Question: 82

View the Exhibit and examine the structure of the PROMOTIONS table. Which two SQL statements would execute successfully? (Choose two.)

- A. UPDATE promotions
SET promo_cost = promo_cost+ 100
WHERE TO_CHAR(promo_end_date, 'yyyy') > '2000';
- B. SELECT promo_begin_date
FROM promotions
WHERE TO_CHAR(promo_begin_date, 'mon dd yy')='jul 01 98';
- C. UPDATE promotions
SET promo_cost = promo_cost+ 100
WHERE promo_end_date > TO_DATE(SUBSTR('01-JAN-2000',8));
- D. SELECT TO_CHAR(promo_begin_date, 'dd/month')
FROM promotions
WHERE promo_begin_date IN (TO_DATE('JUN 01 98'), TO_DATE('JUL 01 98'));

Question: 83

View the Exhibit and examine the structure of the CUSTOMERS table.

You have been asked to produce a report on the CUSTOMERS table showing the customers details sorted in descending order of the city and in the descending order of their income level in each city.

Which query would accomplish this task?

- A. SELECT cust_city, cust_income_level, cust_last_name
FROM customers
ORDER BY cust_city desc, cust_income_level DESC;
- B. SELECT cust_city, cust_income_level, cust_last_name
FROM customers
ORDER BY cust_income_level desc, cust_city DESC;
- C. SELECT cust_city, cust_income_level, cust_last_name
FROM customers
ORDER BY (cust_city, cust_income_level) DESC;
- D. SELECT cust_city, cust_income_level, cust_last_name
FROM customers
ORDER BY cust_city, cust_income_level DESC;

Question: 84

View the Exhibit and examine the structure of CUSTOMERS and GRADES tables.
You need to display names and grades of customers who have the highest credit limit.
Which two SQL statements would accomplish the task? (Choose two.)

- A. SELECT custname, grade
FROM customers, grades
WHERE (SELECT MAX(cust_credit_limit)
FROM customers) BETWEEN startval and endval;
- B. SELECT custname, grade
FROM customers, grades
WHERE (SELECT MAX(cust_credit_limit)
FROM customers) BETWEEN startval and endval
AND cust_credit_limit BETWEEN startval AND endval;
- C. SELECT custname, grade
FROM customers, grades
WHERE cust_credit_limit = (SELECT MAX(cust_credit_limit)
FROM customers)
AND cust_credit_limit BETWEEN startval AND endval;
- D. SELECT custname, grade
FROM customers, grades
WHERE cust_credit_limit IN (SELECT MAX(cust_credit_limit)
FROM customers)
AND MAX(cust_credit_limit) BETWEEN startval AND endval;

Question: 85

View the Exhibit and examine the structure of the PROMOTIONS, SALES, and CUSTOMER tables.

You need to generate a report showing the promo name along with the customer name for all products that were sold during their promo campaign and before 30th October 2007.

You issue the following query:

```
SQL> SELECT promo_name,cust_name  
FROM promotions p JOIN sales s  
ON(time_id BETWEEN promo_begin_date AND promo_end_date)  
JOIN customer c  
ON (s.cust_id = c.cust_id) AND time_id < '30-oct-2007';
```

Which statement is true regarding the above query?

- A. It executes successfully and gives the required result.
- B. It executes successfully but does not give the required result.
- C. It produces an error because the join order of the tables is incorrect.
- D. It produces an error because equijoin and nonequijoin conditions cannot be used in the same SELECT statement.

Question: 86

View the Exhibit and examine the structure of the CUSTOMERS table.

Using the CUSTOMERS table, you need to generate a report that shows the average credit limit for customers in WASHINGTON and NEW YORK.

Which SQL statement would produce the required result?

- A. SELECT cust_city, AVG(cust_credit_limit)
FROM customers
WHERE cust_city IN ('WASHINGTON','NEW YORK')
GROUP BY cust_credit_limit, cust_city;
- B. SELECT cust_city, AVG(cust_credit_limit)
FROM customers
WHERE cust_city IN ('WASHINGTON','NEW YORK')
GROUP BY cust_city,cust_credit_limit;
- C. SELECT cust_city, AVG(cust_credit_limit)
FROM customers
WHERE cust_city IN ('WASHINGTON','NEW YORK')
GROUP BY cust_city;
- D. SELECT cust_city, AVG(NVL(cust_credit_limit,0))
FROM customers
WHERE cust_city IN ('WASHINGTON','NEW YORK');

Question: 87

View the Exhibit and examine the description for the PRODUCTS and SALES table. PROD_ID is a primary key in the PRODUCTS table and foreign key in the SALES table. You want to remove all the rows from the PRODUCTS table for which no sale was done for the last three years.

Which is the valid DELETE statement?

A. DELETE

FROM products

WHERE prod_id = (SELECT prod_id

FROM sales

WHERE time_id - 3*365 = SYSDATE);

B. DELETE

FROM products

WHERE prod_id = (SELECT prod_id

FROM sales

WHERE SYSDATE >= time_id - 3*365);

C. DELETE

FROM products

WHERE prod_id IN (SELECT prod_id

FROM sales

WHERE SYSDATE - 3*365 >= time_id);

D. DELETE

FROM products

WHERE prod_id IN (SELECT prod_id

FROM sales

WHERE time_id >= SYSDATE - 3*365);

Question: 88

Evaluate the following two queries:

SQL> SELECT cust_last_name, cust_city

FROM customers

WHERE cust_credit_limit IN (1000, 2000, 3000);

SQL> SELECT cust_last_name, cust_city

FROM customers

WHERE cust_credit_limit = 1000 OR cust_credit_limit = 2000 OR
cust_credit_limit = 3000;

Which statement is true regarding the above two queries?

A. Performance would improve in query 2.

B. Performance would degrade in query 2.

C. There would be no change in performance.

D. Performance would improve in query 2 only if there are null values in the CUST_CREDIT_LIMIT column.

Question: 89

Which two statements are true regarding views? (Choose two.)

A. A subquery that defines a view cannot include the GROUP BY clause.

B. A view that is created with the subquery having the DISTINCT keyword can be updated.

C. A view that is created with the subquery having the pseudo column ROWNUM keyword cannot be updated.

D. A data manipulation language (DML) operation can be performed on a view that is created with the subquery having all the NOT NULL columns of a table.

Question: 90

Which three statements are true regarding subqueries? (Choose three.)

A. Subqueries can contain GROUP BY and ORDER BY clauses.

B. Main query and subquery can get data from different tables.

C. Main query and subquery must get data from the same tables.

D. Subqueries can contain ORDER BY but not the GROUP BY clause.

E. Only one column or expression can be compared between the main query and subquery.

F. Multiple columns or expressions can be compared between the main query and subquery.

QUIZ questions:

Question 1:

The GROUP BY clause.....

Select one:

- a. updates data statistics used by the PostgreSQL query planner
- b. recovers or reuse disk space occupied by updated or deleted rows
- c. protects against loss of very old data due to transaction ID wraparound
- d. divides the rows returned from the SELECT statement into groups
- e. modifies an index in place to be lowercase

Question 2:

PostgreSQL evaluates the GROUP BY clause after..

Select one:

- a. the Select clause
- b. the HAVING clause
- c. the LIMIT clause
- d. the ORDER BY clause
- e. the FROM and WHERE clauses

Question 3:

When you use the GROUP BY clause without applying an aggregate function, it works like...

Select one:

- a. the LIMIT clause
- b. the DISTINCT clause
- c. the HAVING clause
- d. the JOIN clause
- e. the ORDER BY clause

Question 4:

This query joins the payment table with the customer table and group customers by their names.

Choose the right

answer.

Select one:

a. SELECT firstname || ' ' || lastname fullname, sum(amount) amount
FROM payment

Where customer_id = (select customer_id from customer

GROUP BY fullname

ORDER BY amount DESC)

b. SELECT firstname || ' ' || lastname fullname, sum(amount) amount
FROM payment

GROUP BY fullname

ORDER BY amount DESC;

c. SELECT firstname || ' ' || lastname fullname, sum(amount) amount
FROM payment

INNER JOIN customer USING (customer_id)

GROUP BY fullname

ORDER BY amount DESC;

d. SELECT firstname || ' ' || lastname fullname, sum(amount) amount
FROM doctor

INNER JOIN hospital USING (customer_id)

ORDER BY amount DESC;

e. SELECT firstname || ' ' || lastname fullname, sum(amount) amount
FROM customer

ORDER BY amount DESC;

Question 5:

Aggregate functions...

Select one:

- a. collect statistics about a database
- b. divide the result set into groups of rows
- c. recovers or reuse disk space occupied by updated or deleted rows
- d. perform a calculation on a set of rows and return a single row
- e. perform a calculation across a set of table rows that are somehow related to the current row

Question 6:

The following statement uses the SUM() function to calculate the total payment of the customer id equals 90. Choose the right SQL statement.

Select one:

- a. SELECT SUM(amount) as total
FROM payment
WHERE customer_id>90;
- b. SELECT AVG(amount) as total
FROM payment
WHERE customer_id=90;
- c. SELECT SUM(amount) as total
FROM payment
WHERE customer_id=9000;
- d. SELECT SUM(amount) as total
FROM payment
WHERE customer_id=90;
- e. SELECT MAX(amount) as total
FROM payment
WHERE customer_id=90;

Question 7:

You can use aggregate functions as expressions only in the following clauses:

Select one:

- a. GROUP BY and JOIN clauses
- b. WHERE and ORDER BY clauses
- c. LIMIT and DISTINCT clauses
- d. CREATE and DELETE clauses
- e. SELECT and HAVING clauses

Question 8:

When the DISTINCT option is available, the SUM() of 1, 1, 8, and 2 will return..

Select one:

- a. 11
- b. 14
- c. 15
- d. 12
- e. 13

Question 9:

The DISTINCT option does not have any effects on the..

Select one:

- a. COUNT()
- b. MIN()
- c. AVG()
- d. SUM()

Question 10:

What is a subquery?

Select one:

- a. a link, is a reference to data that the user can follow by clicking or tapping
- b. a column or a group of columns used to identify a row uniquely in a table
- c. a set of rules or procedures for transmitting data between electronic devices, such as computers
- d. a collection of related data which represents some aspect of the real world
- e. a query nested inside another query

Question 11:

Subqueries that return more than one row can only be used with multiple value operators, such as..

Select one:

- a. >
- b. >=
- c. =
- d. <
- e. ANY

Question 12:

What is the function of EXISTS operator in subqueries?

Select one:

- a. only cares about the number of rows returned from the subquery, not the content of the rows
- b. deletes all existed subqueries
- c. performs a calculation across a set of table rows that are somehow related to the current row
- d. returns from the subquery to insert into another table
- e. returns only one row so we can use GROUP BY clause

Question 13:

One of the main rules that subqueries must follow

Select one:

- a. The BETWEEN operator can be used with a subquery
- b. Subquery can have multiple columns in the SELECT clause
- c. Subqueries must be enclosed within parentheses
- d. A subquery can return zero or more rows
- e. Subqueries that return more than one row can only be used with multiple value operators, such as the >, <, =, >=, <=

Question 14:

To find the films whose rental rate is higher than the average rental rate, we can use following statement:

Select one:

- a. SELECT film_id, title, AVG(rental_rate) FROM Film;
- b. SELECT film_id, title, rental_rate FROM film

WHERE rental_rate > (SELECT SUM(rental_rate) FROM film);
c. SELECT film_id, title, rental_rate FROM Film;
d. SELECT film_id, title, rental_rate FROM film
WHERE rental_rate > (SELECT AVG(rental_rate) FROM film);
e. SELECT film_id, title, rental_rate FROM film
WHERE rental_rate>AVG(rental_rate);

Question 15:

What is function of window function?

Select one:

- a. collect statistics about a database
- b. perform a calculation on a set of rows and return a single row
- c. divide the result set into groups of rows
- d. perform a calculation across a set of table rows that are somehow related to the current row
- e. recovers or reuse disk space occupied by updated or deleted rows

Question 16:

The following query returns the product name, the price, product group name, along with the average prices of each product group. Choose the right SQL statement (using the window function).

Select one:

- a. SELECT product_name, price, group_name,
COUNT(price) OVER (PARTITION BY group_name)
FROM products INNER JOIN product_groups USING(group_id);
- b. SELECT product_name, price, group_name,
MIN(price) OVER (PARTITION BY group_name)
FROM products INNER JOIN product_groups USING(group_id);
- c. SELECT product_name, price, group_name,
SUM(price) OVER (PARTITION BY group_name)
FROM products INNER JOIN product_groups USING(group_id);
- d. SELECT product_name, price, group_name,
AVG(price) OVER (PARTITION BY group_name)
FROM products INNER JOIN product_groups USING(group_id);
- e. SELECT product_name price, group_name,
MAX(price) OVER (PARTITION BY group_name)
FROM products INNER JOIN product_groups USING(group_id);

Question 17:

If you skip the PARTITION BY clause, the window function will...

Select one:

- a. divide rows into multiple groups
- b. specify the order of rows in each partition
- c. treat the whole result set as a single partition
- d. define a subset of rows in the current partition

Question 18:

The ROW_NUMBER() function...

Select one:

- a. assigns ranking within an ordered partition. If rows have the same values, the function assigns the same rank, with the next ranking(s) skipped
- b. returns a value evaluated against the first row within its partition

c. assigns a sequential number to each row in each partition

d. assigns a rank to each row within an ordered partition, but the ranks have no gap. In other words, the same ranks

are assigned to multiple rows and no ranks are skipped

e. returns a value evaluated against the last row in its partition

Question 19:

The RANK() function...

Select one:

a. assigns a sequential number to each row in each partition

b. returns a value evaluated against the first row within its partition

c. returns a value evaluated against the last row in its partition

d. assigns ranking within an ordered partition. If rows have the same values, the function assigns the same rank, with the next ranking(s) skipped

e. assigns a rank to each row within an ordered partition, but the ranks have no gap. In other words, the same ranks are assigned to multiple rows and no ranks are skipped

Question 20:

The DENSE_RANK() function...

Select one:

a. assigns a rank to each row within an ordered partition, but the ranks have no gap. In other words, the same ranks are assigned to multiple rows and no ranks are skipped

b. returns a value evaluated against the first row within its partition

c. returns a value evaluated against the last row in its partition

d. assigns ranking within an ordered partition. If rows have the same values, the function assigns the same rank, with the next ranking(s) skipped

e. assigns a sequential number to each row in each partition

Other questions:

What code raises the error?

- raise exception 'duplicate: %', email
using hint = 'check the email again';

PL/pgSQL was designed to..

- create user-defined functions, stored procedures, and triggers

The example of using single quotes for a string constant:

- select 'String constant'; PL/PGSQL if-then-else statement syntax:

- if condition then statements;

else alternative-statements;

end if;

Which subclause of the GROUP BY clause is often used to generate the subtotals and the grand total for reports?

- ROLLUP

The query generates all possible grouping sets based on the dimension columns specified in:

- CUBE

This operator removes all duplicate rows from the combined data set.

- UNION

A view can be very useful in some cases such as:

- A view provides a consistent layer even the columns of underlying table changes.

To use the INTERSECT operator, the columns that appear in the SELECT statements must follow the following rule:

- The number of columns and their order in the SELECT clauses must be the same.

A view, which allows to store data physically are called..

- materialized view

What element of PL/PQSQL supports transactions?

- stored procedures

SQL statement, which creates a hash index

- create index idx_address_phone on address using hash (phone)

The following Venn diagram illustrates:

- EXCEPT

Which of the following is NOT a property of database transactions?

- Insulation

The essence of a transaction is...

- it combines a sequence of actions into one operation

The loop executes a block of code repeatedly until terminated by..

- exit

The transaction is defined by a set of SQL commands surrounded by..

- begin and commit

PL/PGSQL block is ended with __ after the END keyword.

- “ ; ”

What is the role of % in the ‘raise notice’ statement?

- it is placeholder that is replaced by the content of the variable

What is a grouping set?

- a set of columns by which you group by using the GROUP BY clause