Introduction To Oracle - PL/SQL exam practice questions

1) What statement would return the following about clerks in each department ?

DEPTNO	MIN(SAL)	MAX(SAL
10	1300	1300
20	800	1100

A. Select deptno, MIN(sal), MAX(sal)
WHERE job = 'CLERK' GROUP BY deptno;
B. SELECT deptno, MIN(sal), MAX(sal)
GROUP BY deptno;
C. Select deptno, MIN(sal), MAX(sal)
FROM emp WHERE job = 'CLERK'
D. SELECT deptno, MIN(sal), MAX(sal)
FROM emp WHERE job = 'CLERK' GROUP BY deptno;
E. SELECT deptno, MIN, MAX
FROM emp WHERE job = 'CLERK' GROUP BY deptno;

-- For group function, cannot use order by with column not exist in select clause.

2) You are evaluating a procedure that has the function MOD(100,10). What would be the result ?

A. 10000
B. 10
C. 100
D. 0
E. 1000

3) There are four categories of SQL operations. What is the category for operations that include REVOKE, ALTER USER and GRANT ?

A. DCL (Data Control Language)
B. DDL (Data Definition Language)
C. DML (Data Manipulation Language)
D. TCO (Transaction Control Operations)

4) What are the maximum number of columns that can be returned when used with ORDER BY ?

A. 128
B. Equal to the number of columns in the table
C. 255
D. There is no maximum

5) What are the three major theoretical characteristics of an RDBMS ?

A. Integrity
B. Operations -- actions that act upon the data and structures.
C. Instances
D. Structures -- are objects like tables, indexes and view.
D. Fields
E. Records

6) You encounter the following statements:
SELECT e1.ename|| 'works for '||e2.ename "Employees and their Managers"
FROM emp e1, emp e2 WHERE e1.mgr=e2.empno;
What kind of join is this ?

A. Cartesian
B. Self
C. Outer
D. Equi

7) You have the statement "SELECT BirthDate, TO_CHAR(BirthDate, 'Month, ddth "in, YyyY') Formatted". If the data is 11-NOV-46, what will Oracle return as the formatted date ?

A. November ,11th in 1946
B. Nov 11, 1946
C. November 11, 1946
D. November , 01TH in 1946
E. 11-11-46
F. 11/11/46

8) There are four set operators, which one would show common results from queries A and B?

A. UNION ALL
B. UNION
C. MINUS
D. INTERSECT
E. COMMON

9) You need to return the specified setting of the current environment. Your procedure specifically needs to receive the language and territory used by this session. What functions would you use ?

A. USERENV('TERMINAL') -- returns the OS identifier for your current session's terminal. e.g hpmitd38
B. USERENV('INSTANCE') -- returns the instance identification number of the current instance. e,g return 1
C. USERENV('SESSIONID') -- returns your auditing session identifier. e.g return 457
D. USERENV('ENTRYID') -- returns available auditing entry identifier. e.g return 0
E. USERENV('LANGUAGE') -- returns AMERICAN_AMERICA.WE8ISO8859P1
F. USERENV('LANG') -- returns ISO language setting for this session. e.g return US

10) You are writing a procedure that needs to search a database for words that sound alike but are spelled differently. What character functions

A. SOUND(char)
B. SOUNDSLIKE(char)
C. SOUNDEX (char) -- The SOUNDEX function is useful for finding strings for which the sound is known but the precise spelling is not.
D. CHR(n) -- returns the character from ASCII code (n).
C. TRANSLATE(char,from to) -- translates char to another value.

11) You are the DBA of ABC Corp. You need to retrieve the employee names and salaries from the employment tables, and to make the results assorted by salary, NOT in ascending order. Just in case, if two names match for a salary are found, the two names should be shown in alphabetical order. How do you do this?

A. ORDER BY sal NON-ASC, ename;
B. ORDER BY ename, sal;
C. ORDER BY sal DESC, ename;
D. ORDERED BY sal,ename;
E. SORT BY sal DESC, ORDER BY ename

12) You are the DBA for ABC Corp. You are asked to write some SQL statements. When will you NOT to use the where clause when building a SQL query? (choose three)

A. Restrict the rows to be displayed with the group function
B. To show data with value less than a specified value.
C. Compare different values.
D. Specify a table type.
E. Display unique data but nothing else.
F. Restrict the rows to be included in the display.

13) ABC company is about to give each staff a $500 increase in monthly salary. You want to "preview" the result from your database table without making any modification. How do you do that?

A. You cannot do this. Actual update will take place.
B. Give the arithmetic expression to invoke salary increment in the select clause
C. Give the arithmetic expression to invoke salary increment in the where clause
D. Give the arithmetic expression to invoke salary increment in the from clause
E. Give the arithmetic expression to invoke salary increment with an update clause

14) You want to delete a record from the table by prompting the user for an id number of the record. How do you do that?

A. DELETE FROM RecordX WHERE id_number = *id_number
B. DELETE FROM Record WHERE &id_number = id_number
C. DELETE FROM RecordX WHERE id_number = !id_number
D. DELETE FROM Record WHERE id_number := id_number
E. DELETE FROM RecordX WHERE id_number = &id_number

15) You have a table EMP with three columns EMP_NUM ,EMP_NAME and EMP_ADDR. What syntax would you use to create an index on column EMP_NUM?

A. Create index EMP(EMP_NUM);
B. Create index emp_ind on EMP;
C. Create index emp_ind on EMP(EMP_NUM);
D. Create index EMP(EMP_NUM) emp_ind;

--USER_INDEXES - index-name, uniquesness
--USER_IND_COLUMNS -index-name, column_name, column_position, table_name

16) What type of index would you create on a column where you access less than 15% of the total rows?

A. Simple Index
B. B*Tree Index
C. Bitmap Index -- select large number of rows
D. Unique Index
E. Composite Index

17) What criteria must be satisfied from the list below when you want to create an index?

A. The table should be small -- Not create an index if table is small, column not often used, more than 2-4% rows retrieval, and table is updated frequently
B. The column should contain a wide range of values
-- column is used frequently in the where clause, column contain large number of null values, table large and row retrieval less than 2-4% of the rows
C. The table should not be frequently updated.
D. The column should have many null values

18) You created a table with the following syntax:

```
Create table student
(Student_id number(4) primary key,
Student_name varchar2(15),
Course varchar2(10) not null,
Age number(2) check (age between 18 and 65));
```

For which column(s) will an index be created automatically?

A. Student_id -- Indexes are created automatically on columns with the primary key and/ or unique constraints on them
B. Student_name
C. Course
D. Age

19) Which command or action causes an automatic rollback?

A. Grant command
B. Exit at SQL prompt -- Automatic commit
C. Alter command
D. System Crash -- or abnormal termination of SQL*Plus
E. Commit before a system crash

20) The employee table contains information about employees. One of your employees got married, so her last name changed. What command should you use to reflect this change in the table?

A. Alter
B. Create
C. Delete
D. Insert
E. Update

21) What kind of join condition am I creating between the EMP and DEPT table in the following query?

```
Select a.ename, b.job
From emp a, dept d;
```

A. Equijoin
B. Outer Join
C. Castesian product
D. Self Join
E. Non-Equijoin

22) What kind of join condition am I creating in the following query?

```
Select a.ename "Employee", a.job, b.ename, b.job
From emp a, emp b
where a.empno = b.empno;
```

A. Equijoin
B. Outer Join
C. Castesian product
D. Self Join
E. Non-Equijoin

23) Which clause contains the join condition when displaying data from two or more tables?

A. Select
B. From
C. Where
D. Group by
E. Order by

24) What is the minimum number of join conditions required to avoid a Cartesian product if you need to access information from four tables?

A. 0
B. 1
C. 2
D. 3 -- To avoid a Cartesian product we need to include "N-1" join conditions in the query
E. 4

25) When you create an outer join, which character would you use to get information on all the matching rows from a table?

A. @
B. $
C. –
D. +
E. !
F. *

26) When creating a view, what option would you use during creation if you want to prevent the user from updating your table?

A. Using Group function
B. Distinct command
C. Using Group By clause
D. Creating a view With Check Option
E. Creating a read only view.

☞ -- CREATE *NOFORCE* VIEW viewname
(name, minsal, maxsal, avgsal)
AS SELECT d.dname, MIN(e.sal), MAX(e.sal), AVG(e.sal)
FROM emp e, dept d
WHERE e.deptno = d.deptno
GROUP BY d.dname
WITH CHECK OPTION CONSTRAINT constraint_name
WITH READ ONLY

-- Subquery cannot use order by
Modify a view -- use OR REPLACE

-- Cannot remove a row if the view contains group functions, a group by clause, a distinct keyword.
-- Cannot modify data in a view if it contains any conditions mentioned in the above, columns defined by expressions, ROWNUM pseudocolumn
-- Cannot add data if the view contains any of the conditions mentioned above, not null columns in the base tables that are not selected by the view.

27) You dropped the table from which a view has been created. What is the status of the view?

A. View becomes invalid
B. View remains accessible
C. View is dropped also

28) When you use a clause "Comment on table table_name is 'comment' ", what does this do?

A. Assigns a alias to the table
B. Adds a comment columns to the table
C. Adds comments on the table to the data dictionary
D. Adds comments on the column to the data dictionary

-- You can add a comment of up to 2000 bytes about a column, table, view, or snapshot.
-- Comments can be viewed by ALL_COL_COMMENTS, USER_COL_COMMENTS, ALL_TAB_COMMENTS, USER_TAB_COMMENTS

29) Which type of PL/SQL statement would you use to increase the price values by 10 percent for items with more than 2,000 in stock and by 20 percent for items with fewer than 500 in stock?

A. An IF...THEN...ELSE statement
B. A simple INSERT loop
C. A simple UPDATE statement
D. A WHILE loop

30) For which of the following would you use the ALTER TABLE...MODIFY option?

A. Add a column to the table.
B. Disable a table constraint.
C. Drop a table column.
D. Increase the precision of a numeric column.

31) Evaluate this command: SELECT group_id, isotope, AVG(atomic_weight) FROM char_n WHERE AVG(atomic_weight) > 89.00 GROUP BY group_id, isotope ORDER BY AVG(atomic_weight); Which clause will cause an error?

A. SELECT group_id, isotope, AVG(atomic_weight)
B. WHERE AVG(atomic_weight) > 89.00
C. GROUP BY group_id, isotope
D. ORDER BY AVG(atomic_weight);

32) What will the following operation return? [Choose two] SELECT TO_DATE('01-jan-00') - TO_DATE('01-dec-99') FROM dual;

A. 365 if the NLS_DATE_FORMAT is set to 'DD-mon-RR'
B. A VARCHAR2 value
C. An error; you can't do this with dates
D. -36493 if the NLS_DATE_FORMAT is set to the default value

33) You query the database with this command: SELECT CONCAT(LOWER(SUBSTR(description,10)), LENGTH(product_name)) "Product ID" FROM inventory; Which function is evaluated second?

A. CONCAT()
B. LENGTH()
C. LOWER()

34) In the executable section of a PL/SQL block, you include these statements: Isotope_record.isotope := 'XENON'; Isotope_record.group := 'NOBLE GAS'; Which task will be accomplished?

A. A record field will be assigned a character string value.
B. A record field will be created based on the isotope table.
C. A constant will be initialized.
D. A constant will be created.

35) Evaluate this function created with SQL*Plus: CREATE OR REPLACE FUNCTION raise_price (start_value IN NUMBER) RETURN number IS BEGIN RETURN (start_value * 1.75); END lower_price; Why will this function cause an error?

A. A clause is missing.
B. The END clause is incorrect.
C. A keyword is missing
D. The parameter mode should not be specified.
E. The CREATE OR REPLACE statement is invalid.

36) What is a characteristic of only PL/SQL?

A. Accepts input of variables.
B. Allows shutdown of the database.
C. Allows use of exception handling routines based on error numbers.
D. None of the above.

37) Which section of a PL/SQL routine contains functions for error trapping?

A. Declarative
B. Definition
C. Exception
D. Executable

Trapping Predefined Oracle Server Errors

```
-- NO_DATA_FOUND
-- TOO_MANY_ROWS
-- INVALID_CURSOR
-- ZERO_DEVIDE
-- DUP_VAL_ON_INDEX    -attempted to insert a duplicate value
```

Trapping Non-Predefined Oracle Server Errors

```
DECLARE
      e_emps_remaining    EXCEPTION;
      PRAGMA EXCEPTION_INIT (
                        e_emps_remaining, -2292);
 ….
 EXCEPTION
       WHEN e_emps_remaining THEN
        …….
```

User-Defined Exception

```
DECLARE
       e_invalid_product   EXCEPTION;
BEGIN
       …
      IF SQL%NOTFOUND  THEN
          RAISE e_invalid_product;
      END IF;
EXCEPTION
      WHEN e_invalid_product THEN
      ……
END
```

RAISE_APPLICATION_ERROR procedure

Use is Exception section

```
EXCEPTION
        WHEN NO_DATA_FOUND THEN
                RAISE_APPLICATION_ERROR (-20201, 'Manager is not a valid employee');
END;
```

Use in Execution section

```
 ……
DELETE FROM emp
WHERE mgr = v_mgr;
IF SQL%NOTFOUND THEN
       RAISE_APPLICATION_ERROR (-20201, 'Manager is not a valid employee');
END IF;
```

38) What is the purpose of the SQL*Plus command GET?

A. Get the contents of a previously saved operating system file into the buffer.
B. Get a printer assignment
C. Get the contents of the buffer for editing.
D. Return a storage location for the buffer contents.

39) Which statement would you use to query the database for the quantity and description of each item that was ordered before June 1, 1999, and whose price is less than 0.25 or greater than 10.00?

A. SELECT quantity, description FROM inventory WHERE price BETWEEN 0.25 and 10.00 OR order_date < '01-jun-1999';
B. SELECT quantity, description FROM inventory WHERE (price < 0.25 OR price > 10.00) AND order_date<'01-jun-1999';
C. SELECT quantity, description FROM inventory WHERE price < 0.25 OR price > 10.00 AND order_date > '01-jun-1999';
D. SELECT quantity, description FROM inventory WHERE price IN (0.25, 10.00) OR order_date < '01-jun-1999';

40) Evaluate the following command: CREATE TABLE customer (customer_id NUMBER CONSTRAINT pk_customer PRIMARY KEY USING INDEX TABLESPACE customer_index, Customer_entry_date DATE, customer_addresses address_nt, customer_phones phone_v) NESTED TABLE customer_

A. The CREATE TABLE portion
B. The specifications for the NESTED STORAGE
C. The way the types are referred to
D. The partitioning clause

41) You write a SELECT statement with two join conditions. What is the maximum number of tables you have joined together without generating a Cartesian product**?**

A. 0
B. 4
C. 2
D. 3

42) You query the database with this command: SELECT manufacturer_desc FROM manufacturer WHERE manufacturer_id LIKE '%F\%B\%I_%' ESCAPE '\' / For which character pattern will the LIKE operator be searching?

A. F%B%I_
B. FBI_
C. F\%B\%I%_
D. F\B\I_

43) Which of the following best describes a relationship?

A. A thing of significance
B. A distinct characteristic of a thing of significance
C. A named association between two things of significance
D. A description of the way that data flows

44) What is the purpose of the USER_ set of data dictionary views?

A. List all objects, of the specific type, that the user has created.
B. List all objects, of the specific type, that the user has been granted rights on. --ALL_ views
C. List all objects, of the specific type, in the database. --DBA_ views
D. List all dynamic data, of the specific type, about the database. --V$ views

- DBA_ allows users with DBA privilege to access any object in the database.
- V$_ displays database server performance and locking.

- user_tables - desribe tables owned by the user.
- user_objects - view distinct object types owned by the user.
- user_catalog - View tables, views, synonyms, and sequences owned by the user.
- user_tab_columns displays - all the columns in all tables owned by that user.

45) You query the database with this command: SELECT atomic_weight FROM chart_n WHERE (atomic_weight BETWEEN 1 AND 50 OR atomic_weight IN (25, 70, 95)) AND atomic_weight BETWEEN (25 AND 75) Which of the following values could the statement retrieve ?

A. 51
B. 95
C. 30
D. 75

46) You query the database with this command: SELECT isotope, group_id,mass_no, DISTINCT(atomic_weight) FROM chart_n; What values are displayed?

A) Distinct combinations of isotope, group_id, mass_no, and atomic_weight.
B) isotope and distinct combinations of group_id, mass_no, and atomic_weight.
C) isotope, group_id, mass_no, and distinct values of atomic_weight.
D) No values will be displayed because the statement will fail.

47) Evaluate this procedure: CREATE OR REPLACE FUNCTION found_isotope (v_energy_line IN BOOLEAN, v_proper_ratio IN BOOLEAN) RETURN NUMBER IS Ret_val NUMBER; BEGIN IF (v_energy_line AND v_proper_ratio) THEN ret_val:=1; ELSIF NOT (v_energy_line AND v_proper_ratio) THEN ret_val:=2; ELSIF (v_energy_line AND v_proper_ratio) IS NULL THEN ret_val:=-1; END IF; RETURN ret_val; END; If v_energy_line equals TRUE, and v_proper_ratio equals NULL, which value is assigned to ret_val?

A) 1
B) 2
C) -1
D) None of the above

48) Which character can be used in a table name if the name is not placed inside double quotes?

A) %
B) *
C) # -- table name must begin with a letter, can be 1-30 characters long, can contains _, $, #
D) @

49) In the executable section of a PL/SQL block, you include this statement: Product.max_inventory1 := 30; Which task will this accomplish?

A) A composite variable will be assigned a value.
B) A constant will be assigned a value.
C) An index identifier will be assigned a value.
D) A record will be assigned a value.

Creating a pl/sql record

```
TYPE emp_record_type IS RECORD
        (ename emp.ename%TYPE,
         job varchar2(9),
         sal number(7));
emp_record emp_record_type;

emp_record.ename = 'Sow';
emp_record.job = 'Analyst';

or

emp_record emp%ROWTYPE;

emp_record.ename = 'Sow';
```

Creating a pl/sql table (like an array)

```
TYPE ename_table_type IS TABLE OF emp.ename%TYPE
            INDEX BY BINARY_INTEGER;
ename_table ename_table_type;

ename_table(1) := 'Sow';                                    -- no dot column
ename_table(2) := 'Lim';

TYPE date_table_type IS TABLE OF DATE
            INDEX BY BINARY_INTEGER;
date_table date_table_type;

TYPE dept_table_type IS TABLE OF dept%ROWTYPE
            INDEX BY BINARY_INTEGER;
dept_table dept_table_type;

dept_table(15).loc := 'Atlanta'
```

Table methods

If ename_table.EXISTS(1) THEN…

- COUNT
- FIRST LAST - return first index, last index
- PRIOR (n)
- NEXT (n)
- EXTEND (n,i) -increase the size of a pl/sql table.
- TRIM (n) - remove n elements from the end of a PL/SQL table.
- DELETE (m,n) - deletes all elements in range m..n from a PL/SAL table.

50) Which of the following would contain the list of tables from which to retrieve data?

A) SELECT list
B) ORDER BY clause
C) FROM clause
D) GROUP BY clause

51) What is the advantage of using the %TYPE attribute to declare a PL/SQL type ?

A) The name of an unused column in the underlying table may change.
B) The data types or data type sizes of the underlying table columns may change by runtime.
C) The %TYPE attribute forces the data type of the underlying database table column to be what you specify.
D) All column constraints are applied to the variables declared using %TYPE.

52) What function would you use to convert a numeric value into a VARCHAR2?

A. TO_CHAR
B. TO_NUM
C. TO_DATE
D. TO_VARCHAR

53) You query the database with this command: SELECT id_number, (quantity - 100 / 0.15 - 35 + 20) FROM inventory; Which expression is evaluated first?

A. quantity - 100
B. 0.15-35
C. 35 + 20
D. 100 / 0.15

54) Evaluate this command: SELECT i.isotope, g.calibration FROM chart_n i, gamma_calibrations g WHERE i.energy = g.energy; What type of join is the command?

A. Equijoin
B. Nonequijoin
C. Self-join
D. The statement is not a join query

55) What is the purpose of the PL/SQL FETCH command?

A. To define a cursor to be used later
B. To retrieve values from the active set into local variables
C. To call the rows identified by a cursor query into the active set
D. To release the memory used by the cursor

Cursor For Loop (implicit open, fetch, and close cursor)

```
CURSOR emp_cursor IS
        SELECT ename, deptno, sal
        FROM emp
        FOR UPDATE;                                  -- must use update is want to use Where Current of
BEGIN
       FOR emp_record IN emp_cursor LOOP
            IF emp_record.deptno = 30 THEN
               ……
            UPDATE emp
             SET sal = emp_record.sal   * 1.10
             WHERE CURRENT OF emp_cursor;       -- The Where Current Of Clause
       END LOOP;
END;
```

Cursor For Loops Using Subqueries (no need to declare the cursor)

```
BEGIN
      FOR emp_record IN (SELECT ename, deptno FROM emp) LOOP
         …..
      END LOOP;
END;
```

Cursors with Parameters

```
DECLARE
        CURSOR emp_cursor
         (v_deptno NUMBER, v_job VARCHAR2) IS
         SELECT empno, ename
         FROM emp
         WHERE deptno = v_deptno
          AND job = v_job ;
 BEGIN
         OPEN emp_cursor(10, 'CLERK');
  …..
```

The For update Clause

```
DECLARE
       CURSOR emp_cursor IS
        SELECT empno, ename, sal
        FROM emp
        WHERE deptno = 30
        FOR UPDATE NOWAIT    -- return an error if rows are locked by another session.
```

Cursors with Subqueries

```
DECLARE
        CURSOR my_cursor IS
                SELECT t1.deptno, dname, STAFF
                 FROM dept t1, (SELECT deptno, count(*) STAFF
                                FROM emp GROUP BY deptno) t2
                 WHERE t1.deptno - t2.deptno
        AND STAFF >= 5;
```

Controlling Explicit Cursors

1) Declare the cursor.
2) Open the cursor. The OPEN statement executes the query and binds any variables that are referenced. Rows identified by the query are called the active set and positions the cursor (pointer) before the first row. They are now available for fetching.
3) Fetch data from cursor. The FETCH statement loads the current row from cursor into variables. Each fetch causes the cursor to move its pointer to the next row in the active set.
4) Close the cursor.

56) Evaluate this command: ALTER TABLE customer DISABLE CONSTRAINT pk_customer CASCADE; Which task would this command accomplish?

A. Delete only the primary key values.
B. Disable all dependent integrity constraints.
C. Disable only the primary key constraint.
D. Alter all dependent integrity constraint values.

Viewing Constraints

--view all constraint definitions and names

```
SELECT constraint_name, constraint_type, search condition
FROM user_constraints
WHERE table_name = 'EMP';
```

-- view the columns associated with the constraint names

```
SELECT constraint_name, column_name
FROM user_cons_column
WHERE table_name = 'EMP';
```

57) Which of the following is a purpose of the user-defined constraint?

A. To enforce not-null restrictions -- column constraint
B. To enforce referential integrity -- referential integrity constraint
C. **To enforce business rules**
D. To take action based on insertions, updates, or deletions in the base table -- trigger

58) Evaluate this statement: SELECT a.isotope, b.gamma_energy FROM chart_n a, g_energy b WHERE a.isotope ='IODINE' AND a.isotope = b.isotope AND a.mass_no='131' Which type of join is shown

A. Equijoin
B. Nonequijoin
C. Self-join
D. Outer Join

59) Which privilege can be granted only on a DIRECTORY?

A. ALTER
B. DELETE
C. READ
D. INSERT

60) In the executable section of a PL/SQL block, you include these statements: Isotope_record.isotope := 'XENON'; Isotope_record.group := 'NOBLE GAS'; Which task will be accomplished?

A. A record field will be assigned a character string value.
B. A record field will be created based on the isotope table.
C. A constant will be initialized
D. A constant will be created.

61) The PL/SQL executable section contains which type of statements ?

A. PL/SQL and SQL statements to manipulate data in the database
B. The procedure or function name and input/output variable definitions
C. The definition of program variables, constants, exceptions, and cursors
D. Statements to deal with error handling

62) Which of the following is executed automatically?

A. Anonymous PL/SQL block
B. Function
C. Procedure
D. Trigger

63) What is the purpose of the IN operator?

A. Compare two similar values.
B. Perform an equality comparison.
C. Evaluate a range of values.
D. **Restrict results to a specified list of values**.

64) What is the purpose of the SUBSTR string function?

A. To insert a capital letter for each new word in the string
B. To return a specified substring from the string
C. To return the number of characters in the string
D. To substitute a non-null string for any null values returned

65) You attempt to query the database with this command: SELECT NVL(100/efficiency, 'none') FROM calibrations; Why does this statement cause an error when the efficiency values are null?

A. The expression attempts to divide a NULL value.
B. The character string none is not a valid value for the NVL substitution.
B. A NULL value cannot be converted into a string value with any function.
C. A NULL value used in an expression cannot be converted to an actual value

66) Which command would you use to remove all the rows from the isotope table and not allow rollback?

A. DROP TABLE isotope;
B. DELETE isotope;
C. TRUNCATE TABLE isotope;
D. There is no way to remove all rows and not allow rollback

67) When can an index be placed on a view?

A. When you only SELECT from the view
B. When you only DELETE from the view
C. When there is a WITH CHECK OPTION used to create the view
D. When you can UPDATE using the view
E. Never -- cannot index a view

68) Evaluate this command: CREATE FORCE VIEW isotope_groups AS SELECT element, group_id, count(*) isotopes FROM chart_n WHERE atomic_weight>50 GROUP BY element,group_id ORDER BY atomic_weight; Which clause will cause an error?

A. AS SELECT isotope, group_id
B. FROM chart_n
C. WHERE atomic_weight>50
D. ORDER BY atomic_weight; -- cannot use order by in view, order by use when select view

69) When will a PL/SQL block not compile? [Choose two]

A. When an implicit cursor retrieves only one row
B. When an implicit cursor retrieves more than one row
C. When the data types within a SELECT statement are inconsistent
D. When an embedded SELECT statement is missing a required clause

70) You attempt to create a view with this command: CREATE VIEW parts_view AS SELECT id_number, description, sum(quantity) FROM inventory WHERE id_number = 1234 GROUP BY id_number; Which clause causes an error?

✌CREATE VIEW parts_view
👌AS SELECT id_number, description, sum(quantity)
👍FROM inventory
👎WHERE id_number = 1234'
☜GROUP BY id_number;

71) What is the third stage of the system development cycle?

A. Build and document
B. Design
C. Transition
D. Strategy and analysis
E. Production

72) Evaluate this command: CREATE TABLE purchase_items (id_number NUMBER(9), description VARCHAR2(25)) AS SELECT id_number, description FROM inventory WHERE quantity < 10; Why will this statement cause an error

✌A clause is missing.
👌A keyword is missing.
👍The WHERE clause cannot be used when you're creating a table.
👎The data types in the new table must not be defined.

73) What is the default length of a CHAR column?

A. 38
B. 255
C. 4000
D. 1

74) In the executable section of a PL/SQL block, you include this statement: Product.max_inventory1 := 30; Which task will this accomplish?

A. A composite variable will be assigned a value.
B. A constant will be assigned a value.
C. An index identifier will be assigned a value.
D. A record will be assigned a value.

75) When you're designing an application, which step comes first?

A. Map attributes to columns. (3)
B. Map entities to tables. (2)
C. Normalize ERD. (1)
D. Map UID to primary keys. (4)
E. Map relationships to foreign keys. (5)

76) You have a table named CUSTOMER that was created with the following statement:

```
CREATE TABLE CUSTOMER (
CUST_ID NUMBER(5) PRIMARY KEY,
CUST_NAME VARCHAR2(50) NOT NULL,
CUST_TYPE CHAR(1) DEFAULT 'M' NOT NULL ,
LAST_CONTACT_DATE DATE,
RECORD_CREATION_DATE DATE NOT NULL);
```

Given this table definition, which of the following INSERT statements are valid? (choose all correct answers)

A. INSERT INTO CUSTOMER VALUES (12345, 'Big Top Manufacturing', , NULL, SYSDATE);
B. INSERT INTO CUSTOMER (CUST_ID, CUST_NAME, LAST_CONTACT, RECORD_CREATED) VALUES (12345, 'Big Top Manufacturing', NULL, SYSDATE);
C. INSERT INTO CUSTOMER (CUST_ID, CUST_NAME, RECORD_CREATED) VALUES (12345, 'Big Top Manufacturing', SYSDATE);
D. INSERT INTO CUSTOMER (CUST_ID, CUST_NAME, RECORD_CREATED) VALUES (12346, 'Big Top Manufacturing', TO_CHAR(SYSDATE, 'fmMonth ddth, YYYY'));

77) The declaration of which type(s) of constraints can cause the automatic creation of an index? (Choose all correct answers)

A. A PRIMARY KEY constraint
B. A UNIQUE constraint
C. A NOT NULL constraint
D. A FOREIGN KEY constraint
E. A DEFAULT constraint

F. A CHECK constraint

78) It is important to be able to distinguish between SQL, PL/SQL, and SQL*Plus commands. Which of the statements below are SQL*Plus commands (Choose Two)?

A. DESC V$INSTANCE
B. CREATE USER &&1 IDENTIFIED BY &&2
C. SELECT * FROM V$INSTANCE
D. SAVE \oracle\projects\myscript.sql
E. UNION ALL

79) Every day you need to produce a report of all new users added to your database. After doing this for a few days, you get tired of typing the same query over and over again. Instead, you create a script containing the query, and want to ask the user to enter the date to report on. Which of the following SQL*PLUS commands would you use to ask the user for this date?

A. ACCEPT Rept_Date PROMPT "Enter the date of the report: "
B. ACCEPT "Enter the date of the report: " INTO Rept_Date
C. PROMPT "Enter the date of the report: " ACCEPT Rept_Date
D. ACCEPT Rept_Date "Enter the date of the report: "

80) You are the user SCOTT and you have the password TIGER. You have just created a sequence with the command:
CREATE SEQUENCE MySequence
START WITH 1 INCREMENT BY 1 NOMAXVALUE;
You then run this command to verify that your CREATE SEQUENCE statement was successful:
SELECT MySequence.NextVal FROM DUAL;
This statement returns the number 1. You then exit SQL*Plus.
Next, you run the following operating system command:
sqlplus scott/tiger@prod @MyScript.sql
The file MyScript.sql contains:

```
SET SERVEROUTPUT ON

DECLARE
   V_SEQ_VALUE NUMBER;
BEGIN
   SELECT MySequence.CurrVal
   INTO V_SEQ_VALUE
   FROM DUAL;

   DBMS_OUTPUT.PUT_LINE (V_SEQ_VALUE);
END;
 /
EXIT
```

What is the result of this SQL*Plus session?

A. DBMS_OUTPUT.PUT_LINE prints the value 1.
B. DBMS_OUTPUT.PUT_LINE prints the value 2.
C. DBMS_OUTPUT.PUT_LINE prints the value of MySequence.CurrVal, but you cannot see it due to incorrect session settings.
D. An error message is returned.

81) You need to produce a report of all your products and their standard list prices. The products are stored in the PRODUCT table, and the prices are stored in the PRICE table. Some products are new or discontinued and do not have a price in the PRICE table, but they should still be included on the report with a price of 0.00. Which of the following is the correct WHERE clause to complete this SQL command and meet these objectives?

```
SELECT PRODUCT.PRODNO,
PRODUCT.PRODNAME,
NVL(PRICE.PRICE_AMT, 0.00)
FROM PRODUCT, PRICE
```

A. WHERE PRODUCT.PRODNO(+) = PRICE.PRODNO
   AND PRICE.COLUMN_LEVEL = 'LIST';
B. WHERE PRODUCT.PRODNO = PRICE.PRODNO(+)
   AND PRICE.COLUMN_LEVEL = 'LIST';
C. WHERE PRODUCT.PRODNO = PRICE.PRODNO(+)
   AND PRICE.COLUMN_LEVEL = 'LIST'(+);
D. WHERE PRODUCT.PRODNO(+) = PRICE.PRODNO
   AND PRICE.COLUMN_LEVEL(+) = 'LIST';

82) The PRODUCT table contains one row for each product in the inventory. The PRICE table contains one row for each price level for each product. There is at least one price record for each product, but there may be as many as 100 price records for each product. The key for the PRODUCT table is PRODNO, and the foreign key for the PRICE table is PRODNO. If the query that follows updates 100 records, how many rows in total will be returned by the subquery?

```
UPDATE PRICE
SET RECORD_STATUS =
(
  SELECT RECORD_STATUS
  FROM PRODUCT
  WHERE PRODUCT.PRODNO = PRICE.PRODNO
)
WHERE PRICE_LEVEL = 'F16'
```

The subquery will return 100 rows.
The subquery will not have any matches.
The subquery will return 10,000 rows.
The subquery will return between 100 and 10,000 rows, depending on how many price levels are defined for each product.

83) Examine the queries below carefully. Which one will return only the first 100 rows in the EMP table?

A. SELECT TOP 100 EMPNO, ENAME
   FROM EMP
   WHERE STATE = 'FL';
B. SELECT FIRST 100 EMPNO, ENAME
   FROM EMP
   WHERE STATE= 'FL';
C. SELECT EMPNO, ENAME
   FROM EMP
   WHERE ROWID <= 100;

D. SELECT EMPNO, ENAME
FROM EMP
WHERE ROWNUM <= 100;

84) You run a large batch process at night that is taking too long to complete. You think that the job will complete faster if a certain foreign key constraint is disabled before the job starts and re-enabled after the job completes. The table in question is named SALES and the foreign key constraint is named SALES_REGION_FK. Which command should be used to disable this constraint just before your batch job runs?

A. ALTER TABLE SALES DISABLE CONSTRAINT SALES_REGION_FK;
B. ALTER CONSTRAINT SALES.CONSTRAINT SALES_REGION_FK DISABLE;
C. DISABLE CONSTRAINT SALES.SALES_REGION_FK;
D. ALTER TABLE CONSTRAINT SALES.SALES_REGION_FK DISABLE;

85) The controller in your company wants to audit sales commissions and needs your help. He wants to see which salespeople in department 20 have a commission rate that does not exist for any of the salespeople in department 10. You run this query:

```
SELECT EMPNO, EMPNAME
FROM EMP
WHERE DEPTNO = 20
AND NOT EXISTS
(
  SELECT COMM
  FROM EMP
  WHERE DEPTNO = 10
 )
```

If there are some people in department 10 that do not have a commission (COMM is NULL), what will this query return?

A. All the employees in department 20 that have a commission that is not the same as any of the employees in department 10.
B. No employees in department 20, whether or not they have a commission that is the same as one of the employees in department 10.
C. All the employees in department 20 that have a commission that is the same as any of the employees in department 10.
D. All the employees in department 20, whether or not they have a commission that is the same as one of the employees in department 10.

86) You can use the PL/SQL block example to answer the following question:

```
DECLARE
  CURSOR My_Employees IS
  SELECT name, title FROM employee;
  My_Name VARCHAR2(30);
  My_Title VARCHAR2(30);
BEGIN
    OPEN My_Employees;
    LOOP
        FETCH My_Employees INTO My_Name, My_Title;
        EXIT WHEN My_Employees%NOTFOUND;
        INSERT INTO MY_EMPS (MY_EMPNAME, MY_EMPTITLE)
       VALUES (My_Name, My_Title);
    END LOOP;
    CLOSE My_Employees;
END;
```

If you were rewriting this block of PL/SQL, which of the following types of loops would you use if you wanted to reduce the amount of code by utilizing features of the loop that handle mundane aspects of processing automatically?

A. loop ... exit when
B. while ... loop
C. loop ... loop … end
D. cursor for loop

87) You are coding a complex PL/SQL block where several procedures call other procedures. You have one outermost procedure that calls all other procedures. If you wanted to prevent the user of the outermost procedure from having the procedure fail due to an unanticipated problem, you would include which of the following exceptions?

A. no_data_found
B. others
C. zero_divide
D. too_many_rows

88) You are attempting to develop a more robust PL/SQL application. Which of the following keywords allow you to associate a user-defined error message with an exception condition?

A. pragma
B. others
C. raise_application_error
D. exception

89) You are processing some data changes in your SQL*Plus session as part of one transaction. Which of the following choices does not typically indicate the end of a transaction?

A. Issuing an update statement
B. Issuing a commit statement
C. Issuing a rollback statement
D. Ending your session

90) You have just removed 1,700 rows from a table that were no longer needed. In order to save the changes you've made to the database, which of the following statements are used?

A. savepoint
B. commit
C. rollback
D. set transaction

91) To identify the columns that are indexed exclusively as the result of their inclusion in a constraint, which of the following dictionary views would be appropriate?

A. USER_INDEXES
B. USER_TAB_COLUMNS
C. USER_COLUMNS
D.USER_CONS_COLUMNS

92) You are creating some tables in your database as part of the logical data model. Which of the following constraints have an index associated with them that is generated automatically by Oracle?

A. UNIQUE
B. FOREIGN KEY
C. CHECK
D. NOT NULL

93) You have a table with three associated indexes, two triggers, two references to that table from other tables, and a view. You issue the drop table cascade constraints statement. Which of the following objects will still remain after the statement is issued?

A. The triggers
B. The indexes
C. The foreign keys in the other tables
D. The view --View, sequence, synonym will remain, but they are invalid.

94) You are using SQL operations in Oracle. All of the following DATE functions return a DATE datatype, except one. Which one is it?

A. NEW_TIME
B. LAST_DAY
C. ADD_MONTHS
D. MONTHS_BETWEEN

95) You issue a select statement on the BANK_ACCT table containing the order by clause. Which of the following uses of the order by clause would produce an error?

A. order by acctno DESC;
B. order by 1;
C. order by sqrt(1);
D. order by acctno ASC;

96) You execute the query select 5 + 4 from DUAL. You have never inserted data into the DUAL table before. Which of the following statements best describes the DUAL table?

A. Dictionary view containing two schema names
B. Table with one column and one row used in various operations
C. Dictionary view containing two index names
D. Table with two columns and no rows used in various operations

97) You issue the following statement:
SELECT DECODE(ACCTNO, 123456, 'CLOSED', 654321, 'SEIZED',
590395, 'TRANSFER','ACTIVE') FROM BANK_ACCT;
If the value for ACCTNO is 503952, what information will this statement display?

A. ACTIVE
B. TRANSFER
C. SEIZED
D. CLOSED

98) You are entering several dozen rows of data into the BANK_ACCT table.
Which of the following statements will enable you to execute the same statement again and again, entering different values for variables at statement runtime?

A. insert into BANK_ACCT (ACCTNO, NAME) VALUES
(123456,'SMITH');
B. insert into BANK_ACCT (ACCTNO, NAME) VALUES (VAR1, VAR2);
C. insert into BANK_ACCT (ACCTNO, NAME) VALUES (&VAR1,'&VAR2');
D. insert into BANK_ACCT (select ACCTNO, NAME from EMP_BANK_ACCTS);

99) You execute the following SQL statement: select ADD_MONTHS ('28-APR-97',120) from DUAL. What will Oracle return?

A. 28-APR-03
B. 28-APR-07
C. 28-APR-13
D. 28-APR-17

100) On Monday, June 26, 2037, at 10:30 at night, you issue the following statement against an Oracle database:
ALTER SESSION SET NLS_DATE_FORMAT =
'DAY MONTH DD, YYYY: HH:MIAM';
Then, you issue the following statement
SELECT SYSDATE FROM DUAL;
What will Oracle return?

A. 26-JUN-37
B. June 26, 2037, 22:30
C. 26-JUN-2037
D. MONDAY JUNE 26, 2037: 10:30PM

101) You wish to join the data from two tables, A and B, into one result set and display that set in your session. Tables A and B have a common column, called C in both tables. Which of the following choices correctly displays the where clause you would use if you wanted to see the data in table A where the value in column C = 5, even when there was no corresponding value in table B?

A. where A.C = 5 AND A.C = B.C;
B. where A.C = 5 AND A.C = B.C (+);
C. where A.C = 5 AND A.C (+) = B.C(+);
D. where A.C = 5;

102) Each of the following statements is true about referential integrity, except one. Which is it?

A. The referencing column in the child table must correspond with a primary key in the parent.
B. All values in the referenced column in the parent table must be present in the referencing column in the child.
C. The datatype of the referenced column in the parent table must be identical to the referencing column in the child.
D. All values in the referencing column in the child table must be present in the referenced column in the parent.

103) You have a group of values from a column in a table, and you would like to perform a group operation on them. Each of the following functions operate on data from all rows as a group, except for which of the following choices?

A. avg( )
B. sqrt( )
C. count( )
D.stddev( )

104) You have a situation where you need to use the nvl( ) function. All the following statements about the nvl( ) function are true except one. Which is it?

A. nvl( ) returns the second value passed if the first value is NULL.
B. nvl( ) handles values of many different datatypes.
C. nvl( ) returns NULL if the first value is not equal to the second.
D.Both the values passed for nvl( ) must be the same datatype.

105) You are developing a stored procedure that handles table data. The %rowtype expression in PL/SQL allows you to declare which of the following kinds of variables?

A. Records
B. VARCHAR2s
C. PLS_INTEGERs
D. NUMBERs

106) You create a sequence with the following statement:

```
CREATE SEQUENCE MY_SEQ
START WITH 394
INCREMENT BY 12
NOMINVALUE
NOMAXVALUE
NOCACHE
NOCYCLE;
```

Three users have already issued SQL statements to obtain NEXTVAL, and four more have issued SQL statements to obtain CURRVAL. If you issue a SQL statement to obtain the NEXTVAL, what will Oracle return?

A. 406
B. 418
C. 430
D. 442

107) Table EMP has 17,394,430 rows in it. You issue a delete from EMP statement, followed by a commit. Then, you issue a select count(*) to find out how many rows there are in the table. Several minutes later, Oracle returns 0. Why did it take so long for Oracle to obtain this information?

A. The table was not empty.
B. The high-water mark was not reset.
C. Oracle always performs slowly after a commit is issued.
D.The table data did not exist to be counted anymore.

108) After creating a view, you realize that several columns were left out. Which of the following statements would you issue in order to add some columns to your view?

A. alter view
B. create or replace view
C. insert into view
D. create view

109) You are testing several SQL statements for accuracy and usefulness. A SQL statement will result in a Cartesian product as the result of which of the following items?

A. A join statement without a where clause
B. The result of the sum( ) operation
C. select * from DUAL
D.The result of the avg( ) operation

110) In order to set your SQL*Plus session so that your NLS_DATE_FORMAT information is altered in a specific way every time you log into Oracle, what method would be used?

A. Setting preferences in the appropriate menu option.
B. Creating an appropriate login.sql file.
C. Issuing the alter user statement.
D. Issuing the alter table statement.

111) Evaluate this PL/SQL block:

```
DECLARE
    v_lower NUMBER := 2;
    v_upper NUMBER := 100;
    v_count NUMBER := 1;
BEGIN
     FOR I IN v_lower..v_lower LOOP
               INSERT INTO test(results)
               VALUES          (v_count);
               V_count := v_count + 1;
    END LOOP;
END;
```

How many times the For Loop will loop ?

A. 0
B. 1
C. 2
D. 98
E. 100

112) Evaluate this PL/SQL block:

```
DECLARE
        v_result  BOOLEAN;
BEGIN
        DELETE
        FROM   sale
        WHERE salesperson_id IN (25,35,45);
        v_result := SQL%ISOPEN;
    COMMIT;
END;
```

A. 0
B. 3
C. TRUE
D. NULL
E. FALSE -- implicit cursor will automatically close.

113) Review this SQL Statement:

```
SELECT ename, emp_number, salary
FROM employee
WHERE dept_number = (SELECT dept_number
                     FROM department
                     WHERE location IN('CHICAGO','ATLANTA'))
```

Why may this statement return an error?

A. A multiple-row subquery returns one row.
B. A multiple-column subquery returns one column.
C. A single-row subquery returns more than one row.
D. A multiple-row query uses a single-row subquery.
E. A single-row quey uses a multiple-row subquery that returns only one row.

114) Review this SQL statement:

```
SELECT department "Departments", MAX(salary) "Top Salaries"
FROM employee
WHERE department IN (200,300,400)
GROUP BY Departments
HAVING MAX(salary) > 60000;
```

This statement fails when executed. Which change will correct the problem ?

A. Remove the group function from the HAVING clause.
B. Add the condition "MAX(salary) > 60000" to the WHERE clause.
C. Replace the column alias in the GROUP BY clause with the column name.
D. Add the group function(s) used in the SELCT list to the GROUP BY clause.

115) Arrange the events that occur when an explicit cursor is opened and one row is fetched in the appropriate order.

1) PL/SQL variables are populated
2) Current row data is read
3) Pointer is advanced
4) Active set is identified
5) Query is executed
6) Pointer is positioned before first row

116) Given this procedure:

```
PROCEDURE dept_salary
   (v_bonus       IN BOOLEAN,
        v_raise           IN BOOLEAN,
    v_issue_check         IN OUT BOOLEAN)
IS
BEGIN
        v_issue_check := v_bonus OR v_raise;
END;
```

If v_bonus = TRUE and v_raise = NULL, which is assigned to v_raise_check ?

A. TRUE
B. FALSE
C. NULL
D. None

117) The PRODUCT table contains these columns:

```
ID              NUMBER(7)     PK
SALE_PRICE      NUMBER(7,2)
```

Evaluate these two SQL statements:

```
1. SELECT       MAX(sale_price), MIN(sale_price), AVG(sale_price)
   FROM product;
2. SELECT ROUND(MAX(sale_price),2), ROUND(MIN(sale_price),2),
   ROUND(AVG(sale_price),2) FROM product GROUP BY sale_price;
```

How will the results differ ?

A. One of the statements will generate an error.
B. Statement 2 will only display one row of result; ststement1 could display more than one.
C. Statement 1 will display three values; statement 2 will display three values for each sale price.
D. Statement 1 will display a result for each sale price; statement 2 will display a result for each product.

118) Which does NOT happen when rows are found using a FETCH statement ?

A. The cursor remains open after each fetch.
B. **The active set is identified satisfying the search criteria.** -- This's done by Open

C. Output PL/SQL variables are populated with the current row data.
D. The pointer identifying the next row in the active set is advanced.

119) Which query will you use to display the names of all the tables you can access ?

A. SELECT table_name FROM user_tables;
B. SELECT table_name FROM all_user_tables;
C. SELECT tname FROM tab WHERE tabtype = 'TABLE'
D. SELECT object_name FROM all_objects WHERE object_type = 'TABLE';

120) Which of the following activities would take place in the production phase of the system development cycle?

A.Interview users.
B. Develop ERDs.
C. Perform normal routine maintenance.
D. Code all program modules.
E. Test the system for user acceptance.

121) The EMP_SALARY table has two columns, EMP_USER and SALARY. EMP_USER is set to be the same as the Oracle username. To support user MARTHA, the salary administrator, you create a view with the following statement:

```
CREATE VIEW EMP_SAL_VW
AS SELECT EMP_USER, SALARY
FROM EMP_SALARY
WHERE EMP_USER <> 'MARTHA';
```

MARTHA is supposed to be able to view and update anyone in the company's salary, except her own, through this view. Which of the following clauses do you need to add to your view creation statement in order to implement this functionality?

A. with admin option
B. with grant option
C. with security option
D. with check option

122) You are performing some conversion operations in your PL/SQL programs. To convert a date value into a text string, you would use which of the following conversion functions?

A. CONVERT
B. TO_CHAR
C. TO_NUMBER
D. TO_DATE

123) Your attempt to read the view creation code stored in the Oracle data dictionary has encountered a problem. The view code appears to be getting cut off at the end. In order to resolve this problem, which of the following measures are appropriate?

A. Increase the size of the dictionary view.
B. Increase your user view allotment with the alter user statement.
C. Use the set long statement.
D. Use the set NLS_DATE_FORMAT statement.
DI.

124) You are coding a complex PL/SQL block where several procedures call other procedures. You have one outermost procedure that calls all other procedures. If you only wanted to prevent the procedure from failing due to a situation where a select into statement received two or more records, you would include which of the following exceptions?

A. too_many_rows
B. others
C. zero_divide
D. no_data_found

125) You are busy creating your tables based on a logical data model. Which of the following constraints require the references privilege in order to be created?

A. UNIQUE
B. FOREIGN KEY
C. CHECK
D. NOT NULL

126) The INVENTORY table has three columns: UPC_CODE, UNITS, and DELIV_DATE. The primary key is UPC_CODE. New records are added daily through a view. The view was created using the following code:

```
CREATE VIEW DAY_INVENTORY_VW
AS SELECT UPC_CODE, UNITS, DELIV_DATE
FROM INVENTORY
WHERE DELIV_DATE = SYSDATE
WITH CHECK OPTION;
```

What happens when a user tries to insert a record with duplicate UPC_CODE?

A. The statement fails due to with check option clause.
B. The statement will succeed.
C. The statement fails due to PRIMARY KEY constraint.
D. The statement will insert everything except the date.

127) You have a script you plan to run using SQL*Plus that contains one SQL statement that inserts data into one table. Which of the following options is the easiest way for this script to allow you to specify values for variables once in the script, in a way where there is no user interaction?

A. Use define to capture value.
B. Use accept to capture value for each run.
C. Using & to specify values at runtime for the statement.
D. Hardcoded values in the statement.

128) You join data from two tables, EXPNS and EMP, into one result set and display that set in your session. The tables have a common column called EMPID. Which of the following choices correctly displays the where clause you would use if you wanted to see the data in table EMP where the value in column EMPID = 39284, but only when there is a corresponding value in table EXPNS?

A. where EMP.EMPID = 39284 AND EMP.EMPID = EXPNS.EMPID;
B. where EMP.EMPID = 39284 (+) AND EMP.EMPID = EXPNS.EMPID;
C. where EMP.EMPID = EXPNS.EMPID;
D. where EMP.EMPID = 39284 AND EMP.EMPID = EXPNS.EMPID (+);

DI.

129) You want to join data from four tables into one result set and display that set in your session. Table A has a column in common with table B, table B with table C, and table C with table D. You want to further restrict data returned from the tables by only returning data where values in the common column shared by A and B equals 5. How many conditions should you have in the where clause of your select statement?

A. 2
B. 3
C. 4
D. 5

130) You are attempting to explain the Oracle security model for an Oracle database to the new security administrator. What are two components of the Oracle database security model?

A. Password authentication and granting privileges
B. Password authentication and creating database objects
C. Creating database objects and creating users
D. Creating users and password authentication

131) Your application's business logic aligns closely with an Oracle internal error. If you wanted to associate that internal error with a named exception for handling in your application, in which of the following areas in your procedure code must you include some support of this exception?

A. DECLARATION and EXCEPTION only.
B. DECLARATION, EXECUTION, and EXCEPTION.
C. EXCEPTION only.
D. No coding, definition, or exception handlers are required to raise this exception.

132) In an expense application, you are searching for employee information in the EMPLOYEE table corresponding to an invoice number you have. The INVOICE table contains EMPID, the primary key for EMPLOYEE. Which of the following options is appropriate for obtaining data from EMPLOYEE using your invoice number?

A. select * from EMPLOYEE where empid = &empid;
B. select * from EMPLOYEE where empid = 69494;
C. select * from EMPLOYEE where empid = (select empid from invoice where invoice_no = 4399485);
D. select * from EMPLOYEE;

133) Which of the following uses does not describe an appropriate use of the having clause?

A. To put returned data into sorted order
B. To exclude certain data groups based on known criteria
C. To include certain data groups based on unknown criteria
D. To include certain data groups based on known criteria

134) You are managing data access for an application with 163 tables and 10,000 users. Which of the following objects would assist in managing access in this application by grouping privileges into an object that can be granted to users at once?

A. Sequences
B. Tables
C. Indexes

D. Roles

135) After logging on to Oracle the first time to access table EMP, user SNOW is told to change his password. Which of the following statements allows him to do so?

A. alter user
B. alter table
C. alter role
D. alter index

136) User SNOW executes the following statement: select * from EMP. This statement executes successfully, and SNOW can see the output. Table EMP is owned by user REED. What object would be required in order for this scenario to happen?

A. User SNOW would need the role to view table EMP.
B. User SNOW would need the privileges to view table EMP.
C. User SNOW would need a synonym for table EMP.
D. User SNOW would need the password for table EMP.

137) You develop a PL/SQL block containing a complex series of data changes. A user then executes your PL/SQL block. At what point will the data changes made be committed to the database?

A. When the PL/SQL block finishes
B. After each individual update
C. Whenever the commit command is issued
D. When you, the creator of the PL/SQL block, disconnect from your session

138) If you would like to code your PL/SQL block to select some data from a table, and then run through each row of output and perform some work, which of the following choices best identifies how you would do so?

A. Implicit cursors with a cursor for loop
B. Implicit cursors with implicit cursor attributes
C. Explicit cursors with a cursor for loop
D. Explicit cursors with implicit cursor attributes

139) You have the following code block declaration in PL/SQL:

```
DECLARE
CURSOR EMP_1 IS
SELECT * FROM EMP
WHERE EMPID = '40593';
CURSOR EMP_2 IS
SELECT * FROM EMP
WHERE EMPID = '50694';
BEGIN...
```

How could you rewrite this declaration block to reduce the number of explicit cursors used in your program?

A. Using cursor for loops
B. Using %rowtype
C. Using %notfound
D. Passing EMPID values as parameters to the cursor

140) You issue the following statement in Oracle:

```
SELECT * FROM EMP WHERE DEPT IN
(SELECT DEPT FROM VALID_DEPTS
WHERE DEPT_HEAD = 'SALLY'
ORDER BY DEPT);
```

Which of the following choices best indicates how Oracle will respond to this SQL statement?

A. Oracle returns the data selected.
B. Oracle returns data from EMP but not VALID_DEPTS.
C. Oracle returns data from VALID_DEPTS but not EMP.
D. Oracle returns an error.

141) You would like to reference a table in your PL/SQL block. What special syntactic attribute must you precede the SQL statement with in order to make the PL/SQL block compile?

A. Put a colon in front of all variables.
B. Use /* */ to surround the SQL code.
C. Prefix the command exec SQL in front of the statement.
D. No special syntax is required.

142) You are coding SQL statements in SQL*Plus. Which of the following is a valid SQL statement?

A. select nvl(sqrt(59483)) from dual;
B. select to_char(nvl(sqrt(59483), 0)) from dual;
C. select to_char(nvl(sqrt(59483), 'VALID')) from dual;
D. select (to_char(nvl(sqrt(59483), '0')) from dual;

143) The following output is from a SQL*Plus session:

```
select PLAY_NAME||', ' || AUTHOR play_table from PLAYS;
My Plays and Authors
-------------------------------------
Midsummer Night's Dream, SHAKESPEARE
Waiting For Godot, BECKETT
The Glass Menagerie, WILLIAMS
```

Which of the following SQL*Plus commands produced it?

A. column PLAY_TABLE alias "My Plays and Authors"
B. column PLAY_TABLE format a12
C. column PLAY_TABLE heading "My Plays and Authors"
D. column PLAY_TABLE as "My Plays and Authors"

Other command

```
COLUMN sal JUSTIFY LEFT FORMAT $99,999.00
COLUMN mgr FORMAT 9999999 NULL 'No manager'
```

144) You create a view with the following statement:
CREATE VIEW BASEBALL_TEAM_VW
AS SELECT B.JERSEY_NUM, B.POSITION, B.NAME
FROM BASEBALL_TEAM B
WHERE B.NAME = USER;
What will happen when user JONES attempts to select a listing for user SMITH?

A. The select will receive an error.
B. The select will succeed.
C. The select will receive NO ROWS SELECTED.
D. The select will add data only to BASEBALL_TEAM.

145). Which of the following choices identifies a PL/SQL block containing the correct syntax for a cursor for loop?

A. DECLARE
CURSOR My_Employees IS
SELECT * FROM employee;
My_NameVARCHAR2(30);
My_Title VARCHAR2(30);
BEGIN
OPEN My_Employees;
FOR csr_rec IN My_Employees LOOP
INSERT INTO MY_EMPS (MY_EMPNAME, MY_EMPTITLE)
VALUES (My_Name, My_Title);
END LOOP;
CLOSE My_Employees;
END;

B. DECLARE
CURSOR My_Employees IS
SELECT * FROM employee;
csr _rec VARCHAR2(30);
BEGIN
FOR csr_rec IN My_Employees LOOP
EXIT WHEN My_Employees%NOTFOUND;
INSERT INTO MY_EMPS (MY_EMPNAME, MY_EMPTITLE)
VALUES (csr_rec.name, csr_rec.title);
END LOOP;
END;

C. DECLARE
CURSOR My_Employees IS
SELECT name, title FROM employee;
BEGIN
FOR csr_rec IN My_Employees LOOP
INSERT INTO MY_EMPS (MY_EMPNAME, MY_EMPTITLE)
VALUES (csr_rec.name, csr_rec.title);
END LOOP;
END;

D. DECLARE
CURSOR My_Employees IS
SELECT name, title FROM employee;
My_Name VARCHAR2(30);
My_Title VARCHAR2(30);
BEGIN
OPEN My_Employees;
LOOP
FETCH My_Employees INTO My_Name, My_Title;
EXIT WHEN My_Employees%NOTFOUND;
INSERT INTO MY_EMPS (MY_EMPNAME, MY_EMPTITLE)
VALUES (My_Name, My_Title);
END LOOP;
CLOSE My_Employees;
END;

146) Inspect the following SQL statement:

```
SELECT FARM_NAME, COW_NAME,
COUNT(CARTON) AS NUMBER_OF_CARTONS
FROM COW_MILK
GROUP BY COW_NAME;
```

Which of the following choices contains the line with the error?

A. select FARM_NAME, COW_NAME,
B.count(CARTON) as NUMBER_OF_CARTONS
C. from COW_MILK
D. group by COW_NAME;
E. There are no errors in the statement.

147) All of the following types of PL/SQL blocks are stored within the Oracle database for reusability, except for one type. Which type is it?

A. Functions
B. Procedures
C. Package specs
D. Package bodies
E. Anonymous blocks
☺ F. Triggers

148) SELECT COW_NAME,
MOD(CARTON, FILL_STATUS)
FROM COW_MILK
GROUP BY COW_NAME;

Which of the following lines contains an error?

A. select COW_NAME,
B. mod(CARTON, FILL_STATUS)
C. from COW_MILK
D. group by COW_NAME;
E. There are no errors in this statement.

149) You are writing queries against an Oracle database. Which of the following queries takes advantage of an inline view?

A. select * from EMP_VW where EMPID = (select EMPID from INVOICE where INV_NUM = 5506934);
B. select A.LASTNAME, B.DEPT_NO from EMP A, (select EMPID, DEPT_NO from DEPT) B where A.EMPID = B.EMPID;
C. select * from EMP where EMPID IN (select EMPID from INVOICE where INV_NUM > 23);
D. select 'select * from EMP_VW where EMPID is NOT NULL;' from USER_TABLES;

150) For the following question, assume that before the following PL/SQL block is executed, table MY_TAB contains one column called COLUMN1, and one row with the value 'FLIBBERJIBBER'.

```
DECLARE
     VAR1 VARCHAR2(1);
     VAR2 VARCHAR2(1);
 IS
BEGIN
     SELECT TO_CHAR(CEIL(SQRT(40)))
     INTO VAR2
     FROM DUAL;
     SELECT SUBSTR(COLUMN1,4,1)
     INTO VAR1
     FROM MY_TAB;
     IF VAR1 = 'J' THEN
               VAR2 := '5';
     ELSIF VAR2 = '7' THEN
               VAR2 := 'L';
     ELSE
               VAR2 = '9';
     END IF;
     INSERT INTO MY_TAB VALUES (VAR2);
     COMMIT;
 END;
```

What is the value of COLUMN1 after executing this code block?

A. 5
B. 7
C. L
D. 9
E. J

151) You create the following PL/SQL block:

```
DECLARE
        VAR1 CONSTANT NUMBER := 90;
        VAR2 NUMBER := 0;
BEGIN
        SELECT ACCTNO
        INTO VAR2
        FROM BANK_ACCT
        WHERE NAME = 'LEWIS';
        VAR1 := VAR2 + 3049;
END;
```

Which of the following lines in this block of PL/SQL code will produce an error?

A. VAR2 NUMBER := 0;
B. into VAR2
C. where NAME = ’LEWIS’;
D. VAR1 := VAR2 + 3049;
E. There are no errors in this PL/SQL block.

152) You are preparing to compile a block of PL/SQL code. The lines in the block are shown in the following choices:

```
CREATE FUNCTION FOO (VAR1 IN VARCHAR2) IS
    VAR2 VARCHAR2(1);
BEGIN
    SELECT GENDER INTO VAR2 FROM EMP
    WHERE LASTNAME = 'SMITHERS';
  IF VAR1 = 6 THEN RETURN (6) ELSE RETURN (8);
END;
```

Which of the lines of PL/SQL code contain an error?

A. create function foo(VAR1 IN VARCHAR2) is
B. select GENDER into VAR2 FROM EMP
C. where LASTNAME = ’SMITHERS’;
D. if VAR1 = 6 then RETURN (6) else return (8);
E.There are no errors in this PL/SQL block.

153) You are managing constraints on a table in Oracle. Which of the following choices correctly identifies the limitations on CHECK constraints?

A. Values must be obtained from a lookup table.
B. Values must be part of a fixed set defined by create or alter table.
C. Values must include reserved words like sysdate and user.
D. Column cannot contain a NULL value.

154) Review the following statement:

```
CREATE TABLE FOOBAR
( MOO VARCHAR2(3),
BOO NUMBER);
```

This table contains 60,000,000 rows. You issue the following statement:
SELECT MOO, BOO FROM FOOBAR WHERE MOO = 'ABC'
This value appears in column MOO less than 10 percent of the time. Yet, the query takes several minutes to resolve. Which of the following explanations is the best reason why?

A. Oracle didn't use the existing primary-key index.
B. select statements that do not use views take longer to resolve.
C. Table FOOBAR has no primary key, and therefore no index on MOO.
D. The table had been dropped and re-created.

155) You have created a table called EMP with a primary key called EMP_PK_01. In order to identify any objects that may be associated with that table and primary key, what dictionary views and characteristics would you look for?

A. USER_SEQUENCES, sequences created at the same time
B. USER_TABLES, tables with the same number of columns
C. USER_IND_COLUMNS, constraints with the same name as the table
D. USER_INDEXES, indexes with the same name as the constraint

156) You are designing your database, and you are attempting to determine the best method for indexing your tables. Identify a main advantage for using bitmap indexes on a database.

A. To improve performance on columns with many unique values
B. To improve performance on columns with few unique values
C. To improve performance on columns with all unique values
D. To improve performance on sequences with all unique values

157) You can use the PL/SQL block example to answer the following question:

```
DECLARE
      CURSOR CARTON_CRSR IS
      SELECT CARTON FROM MILK;
      MY_CARTON MILK.CARTON%TYPE;
BEGIN
      OPEN CARTON_CRSR;
      LOOP
          FETCH CARTON_CRSR INTO MY_CARTON;
          INSERT INTO MY_MILK_CRATE (CARTON)
          VALUES (MY_CARTON);
      END LOOP;
      CLOSE CARTON_CRSR;
END;
```

What is wrong with this PL/SQL block?

A. It will not work unless the loop is rewritten as a cursor for loop.
B. The exception handler must be defined if cursor is not declared.
C. The user does not have permission to execute the block.

D. A loop exit condition must be defined.
E. There are no errors in this code block.

158) Your PL/SQL block includes the following statement:

```
SELECT EMP_ID
INTO MY_EMPID
FROM EMPLOYEE
WHEN LASTNAME = 'FRANKLIN';
```

You want Oracle to process the situation where no data is retrieved for that LASTNAME value. Which of the following actions should be taken?

A. Include the %found implicit cursor attribute
B. Include the %notfound implicit cursor attribute
C. Include the when rowtype_mismatch exception
D. Nothing; Oracle raises this as an exception automatically.

159) You create a table with a primary key that is populated on insert with a value from a sequence, then add several hundred rows to the table. You then drop and re-create the sequence with the original sequence code.

Suddenly, your users are getting constraint violations. Which of the following explanations is most likely the cause?

A. Dropping a sequence also removes any associated primary keys.
B. Any cached sequence values before it was dropped are unusable.
C. The table is read only.
D. The inserts contain duplicate data due to the reset sequence.

160) You are developing SQL statements for the application. Which of the following SQL operations requires the use of a subquery?

A. in
B. exists
C. between
D. like

161) Review the following transcript from a SQL*Plus session:

```
SELECT CEIL(4093.505) FROM DUAL;
CEIL(4093.505)
--------------------
        4094
```

Which single-row function could not be used to produce 4093 from the number passed to the ceil( ) function?

A. round( )
B. trunc( )
C. floor( )
D. abs( )

162) You have a script you plan to run using SQL*Plus that contains several SQL statements that update banking information for one person in several different tables based on name. Since the script only changes information for one person, you want the ability to enter the name only once, and have that information reused throughout the script. Which of the following options is the best way to

accomplish this goal in such a way that you don't have to modify the script each time you want to run it?

A. Use define to capture name value for each run.
B. Use accept to capture name value for each run.
C. Using the & character to specify lexical substitution for names at runtime.
D. Hardcode names in all SQL statements, and change the value each run.

163) You are developing some code to handle transaction processing. Each of the following items signifies the beginning of a new transaction, except one. Which is it?

A. savepoint
B. set transaction
C. Opening a new session
D. commit

164) You are coding a PL/SQL block. PROC_A calls PROC_B, which then calls PROC_C, and PROC_B has no exception handler. If you wanted to prevent the PROC_A procedure from failing due to a \ situation in PROC_B where the divisor in a division statement was zero, how would you address this in your code?

A. Use an if %zero_divide statement immediately following the math operation.
B. Code a when zero_divide exception handler in PROC_C.
C. Code a when others exception handler in PROC_A.
D. Code a when others exception handler in PROC_C.

165) If you wanted to define an exception that caused no Oracle errors but represented a violation of some business rule in your application, in which of the following areas in your procedure code must you include some support of this exception?

A. DECLARATION and EXCEPTION only
B. DECLARATION, EXECUTION, and EXCEPTION
C. EXCEPTION only
D. No coding or definition is required to

166) You are at the beginning of your current transaction and want to prevent your transaction from being able to change data in the database. To prevent any statements in the current transaction from altering database tables, which statement is used?

A. set transaction
B. rollback
C. commit
D. savepoint

167) Your application searches for data in the EMP table on the database on a nullable column indicating whether a person is male or female. To improve performance, you decide to index it. The table contains over 2,000,000 rows, and the column contains few NULL values. Which of the following indexes would be most appropriate?

A. Nonunique B-tree index
B. Unique B-tree index
C. Bitmap index
D. Primary-key indexes

168) Your employee expense application stores information for invoices in one table. Each invoice can have several items, which are stored in another table. Each invoice may have one or more items, or none at all, but every item must correspond to one invoice. The relationship between the INVOICE table and INVOICE_ITEM table is best marked as what kind of relationship on a logical data model?

A. Optional, one-to-many
B. Mandatory, one-to-many
C. Mandatory, one-to-one
D. Optional, one-to-one

169) In considering the logical aspects to physical aspects of a database, which of the following choices best represents the mapping of physical datafiles to their logical counterparts?

A. Extents
B. Tablespaces
C. Segments
D. Blocks

170) You are comparing the storage implementation strategy employed by Oracle to the strategy for storage implementation used in hierarchical database systems like IMS. Which three of the following choices represent advantages of the RDBMS implementation that are not present in hierarchical databases? (Choose three.)

A. RDBMS requires that you define how to obtain data.
B. RDBMS defines how to obtain data for you.
C. RDBMS can model master/detail relationships.
D. RDBMS allows flexibility in changing data relationships.
E. RDBMS is able to model relationships other than master/detail.

171) Which of the following choices does not identify a benefit for using PL/SQL that a developer might want to employ in an Oracle RDBMS application?

A. Ease of accessing data stored in Oracle
B. Ease of integrating programs written in different languages
C. Ability to manipulate cursor data
D. Ability to handle errors without explicit conditional operations