

Oracle

EXAM 1Z0-144

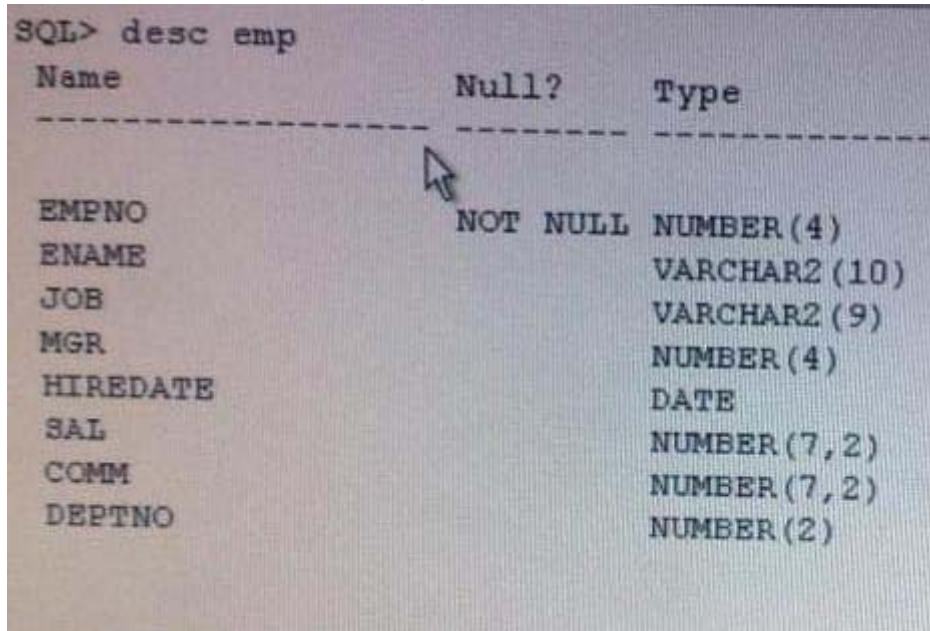
Oracle Database 11g: Program with PL/SQL

Total Questions:

80

Question: 1

View the Exhibit to examine the PL/SQL code:



The screenshot shows the output of the SQL command 'desc emp'. It displays the table structure with columns: Name, Null?, and Type. The columns listed are EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, and DEPTNO. A mouse cursor is pointing at the 'NOT NULL' text for the EMPNO column.

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

SREVIROUPUT is on for the session. Which statement is true about the output of the PL/SQL block?

- A. The output is $x = y$.
- B. It produces an error.
- C. The output is $x \neq y$.
- D. The output is Can't tell if x and y are equal or not.

Answer: A

Question: 2

Examine the following command:

```
SQL> ALTER SESSION  
SET plsql_warnings *  
'enable:severe',  
'enable:performance',  
'ERROR:05003';
```

What is the implication of the above command?

- A. It issues a warning whenever ERROR: 05003 occur during compilation.
- B. It causes the compilation to fail whenever the warning ERROR.05003 occurs.
- C. It issues warnings whenever the code causes an unexpected action or wrong results performance problems.
- D. It causes the compilation to fail whenever the code gives wrong results or contains statements that are never executed.

Answer: C

Question: 3

View the exhibit and examine the structure of the products table.

Name	Null?	Type
PROD_ID	NOT NULL	NUMBER(4)
PROD_NAME	NOT NULL	VARCHAR2(10)
PROD_LIST_PRICE	NOT NULL	NUMBER(8,2)
PROD_VALID		VARCHAR2(1)

Examine the following code

```
CREATE TABLE debug_output (msg VARCHAR2(100));

CREATE OR REPLACE PROCEDURE debugging (msg VARCHAR2) AS
PRAGMA AUTONOMOUS_TRANSACTION;
BEGIN
    INSERT INTO debug_output VALUES (msg);
    COMMIT;
END debugging;
/

CREATE OR REPLACE PROCEDURE delete_details(p_id NUMBER) AS
msg VARCHAR2(100);
BEGIN
    DELETE FROM products WHERE prod_id = p_id;
    COMMIT;
EXCEPTION
    WHEN OTHERS THEN
        msg := SUBSTR(sqlerrm,100);
        debugging (msg);
END delete_details;
/
```

Which statement is true when the procedure DELETE_DETAILS is invoked?

- A. It executes successfully but no error messages get recorded in the DEBUG_OUTPUT table
- B. It executes successfully and any error messages get recorded in the DEBUG_OUTPUT table.
- C. It gives an error because PRAGMA AUTONOMOUS_TRANSACTION can be used only in packaged procedures.
- D. It gives an error because procedures containing PRAGMA AUTONOMOUS_TRANSACTION cannot be called from the exception section.

Answer: A

Question: 4

Which two tasks should be created as functions instead of as procedures? (Choose two.)

- A. reference host or bind variables in a PL7SQL block of code
- B. tasks that compute and return multiple values to the calling environment
- C. tasks that compute a value that must be returned to the calling environment
- D. tasks performed in SQL that increase data independence by processing complex data analysis within the Oracle server, rather than by retrieving the data into an application

Answer: A, C

Question: 5

View Exhibit1 and examine the structure of the employees table.

Name	Null?	Type
-----	-----	-----
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8, 2)
COMMISSION_PCT		NUMBER (2, 2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

View Exhibit2 and examine the code.

```
DECLARE
emp_num NUMBER(6) := 120;
sal NUMBER;
FUNCTION increase (emp_num NUMBER)
RETURN number IS
inc_amt NUMBER;
BEGIN
SELECT salary INTO sal FROM employees WHERE employee_id = emp_num;
inc_amt := sal * .10;
RETURN inc_amt;
END;
PROCEDURE raise_salary (emp_id NUMBER) IS
amt NUMBER;
BEGIN
amt := increase (emp_num);
UPDATE employees SET salary = salary + amt
WHERE employee_id = emp_id;
END raise_salary;
BEGIN
raise_salary(emp_num);
COMMIT;
END;
/
```

What would be the outcome when the code is executed?

- A. It executes successfully.
- B. It gives an error because the SAL variable is not visible in the increase function.
- C. It gives an error because the increase function cannot be called from the RAISE_SALARY procedure.
- D. It gives an error because the increase function and the RAISE_SALARY procedure should be declared at the beginning of the declare section before all the other declarations.

Answer: A

Question: 6

What is the correct definition of the persistent state of a packaged variable?

- A. It is a private variable defined in a procedure or function within a package body whose value is consistent within a user session.
- B. It is a public variable in a package specification whose value is consistent within a user session.
- C. It is a private variable in a package body whose value is consistent across all current active sessions.
- D. It is a public variable in a package specification whose value is always consistent across all current active sessions.

Answer: B

Question: 7

Examine the following block of code:

```
1 DECLARE
2   status          VARCHAR2(10) NOT NULL DEFAULT 'TRUE';
3   net_value       NUMBER := 555;
4   done            BOOLEAN;
5   valid_id        BOOLEAN := TRUE;
6 BEGIN
7   done := (net_value > 100);
8   status := valid_id;
9 END;
```

Which line in the above code would result in errors upon execution?

- A. line 5
- B. line 8
- C. line 2
- D. line 7

Answer: B

Question: 8

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

Name	Null?	Type
CUST_ID	NOT NULL	NUMBER
CUST_LAST_NAME	NOT NULL	VARCHAR2(40)
CUST_CITY	NOT NULL	VARCHAR2(30)
CUST_CREDIT_LIMIT		NUMBER
CUST_CATEGORY		VARCHAR2(20)

Examine the following trigger code:

```

CREATE OR REPLACE TRIGGER max_credit_limit
  BEFORE INSERT OR UPDATE OF cust_category ON customer
  FOR EACH ROW
  WHEN (NEW.cust_category IS NULL)
BEGIN
  IF INSERTING THEN
    :NEW.cust_category := 'C';
    :NEW.cust_credit_limit := 8000;
  ELSIF UPDATING THEN
    :NEW.cust_category := :OLD.cust_category;
    :NEW.cust_credit_limit := :OLD.cust_credit_limit;
  END IF;
END;
/

```

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What is the outcome when the above trigger is compiled?

- A. It compiles successfully.
- B. It gives an error because the when condition is not valid.
- C. It gives an error because when cannot be used for row-level triggers.
- D. It gives an error because the statements under updating are not valid.
- E. It gives an error because the new qualifier in the when clause requires a colon prefix.

Answer: A

Question: 9

Which statements are true about PL/SQL procedures? (Choose all that apply.)

- A. Users with definer's rights who are granted access to a procedure that updates a table must be granted access to the table itself.
- B. Reuse of parsed PL/SQL code that becomes available in the shared SQL area of the server avoids the parsing overhead of SQL statements at run time.
- C. Depending on the number of calls, multiple copies of the procedure are loaded into memory for execution by multiple users to speed up performance.
- D. A PL/SQL procedure executing on the Oracle database can call an external procedure or function that is written in a different programming language, such as C or Java.

Answer: B,D

Question: 10

The STRING_TAB table has the following structure:

Name	Null?	Type
-----	-----	-----
STRING1		VARCHAR2(100)

View the Exhibit and examine the code.

```
SQL>SET SERVEROUTPUT ON
SQL>DECLARE
    in_string VARCHAR2(25) := 'This is my test string.';
    out_string VARCHAR2(25);
    PROCEDURE double (original IN VARCHAR2,
                      new_string OUT VARCHAR2) IS
    BEGIN
        new_string := original || ' + ' || original;
    EXCEPTION
        WHEN VALUE_ERROR THEN
            DBMS_OUTPUT.PUT_LINE('Output buffer not long enough. ');
            COMMIT;
    END;
    BEGIN
        double(in_string, out_string);
        DBMS_OUTPUT.PUT_LINE(in_string || ' - ' || out_string);
    END;
    /
```

What is the outcome on execution?

- A. It displays
Out put buffer not long enough.
This is my test string.-.
- B. It displays only
Output buffer not long enough, and exits the anonymous block.
- C. It displays only
This is my test string. - Because EXCEPTION should have been defined in the anonymous block to get the error message.
- D. It does not display any of the MEMS_PUTPUT messages and gives an error because a transaction control statement cannot be used in the exception section of a procedure.

Answer: A

Question: 11

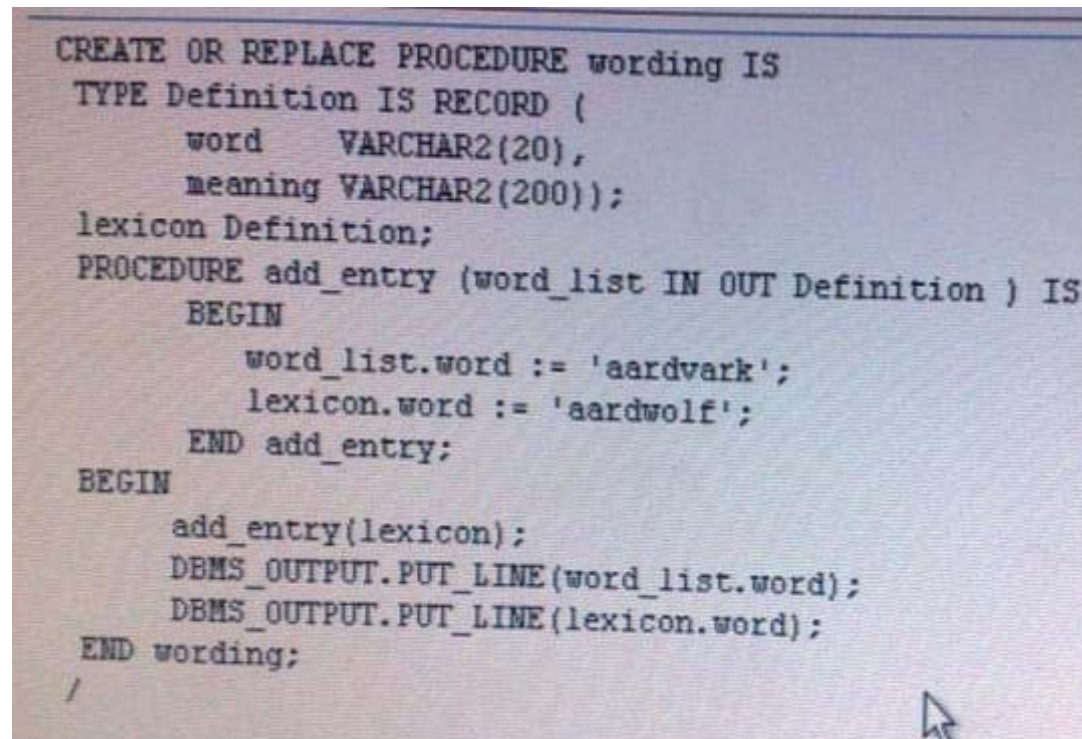
Identify two situations where the DBMS_SQL package should be used. (Choose two.)

- A. The select list is not known until run time.
- B. The dynamic SQL statement retrieves rows into records.
- C. You do not know how many columns a select statement will return, or what their data types will
- D. You must use the %found SQL cursor attribute after issuing a dynamic SQL statement that is an insert or update statement.

Answer: A, C

Question: 12

View the Exhibit and examine the code.



```
CREATE OR REPLACE PROCEDURE wording IS
  TYPE Definition IS RECORD (
    word      VARCHAR2(20),
    meaning   VARCHAR2(200));
  lexicon Definition;
  PROCEDURE add_entry (word_list IN OUT Definition ) IS
  BEGIN
    word_list.word := 'aardvark';
    lexicon.word := 'aardwolf';
  END add_entry;
BEGIN
  add_entry(lexicon);
  DBMS_OUTPUT.PUT_LINE(word_list.word);
  DBMS_OUTPUT.PUT_LINE(lexicon.word);
END wording;
```

Why does the code give an error on execution?

- A. because the WORD_LIST variable is not visible in procedure wording
- B. because the lexicon variable is not visible in procedure ADD_ENTRY
- C. because the lexicon variable is not initialized in procedure wording
- D. because the WORD_LIST parameter in out mode cannot be of a record data type

Answer: A

Question: 13

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

```
SQL>DECLARE
  v_sal NUMBER;
BEGIN
  SELECT sal INTO v_sal FROM emp WHERE empno = 130;
  INSERT INTO emp(empno, ename, sal) VALUES (185, 'Jones', v_sal+1000);
END;
/
```

Which stages are performed when the above block is executed? (Choose all that apply)

- A. Bind
- B. Parse
- C. Fetch
- D. Execute

Answer: B, C, D

Question: 14

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

```
SQL> desc emp
Name                Null?    Type
-----
EMPNO                NOT NULL NUMBER(4)
ENAME                VARCHAR2(10)
JOB                  VARCHAR2(9)
MGR                  NUMBER(4)
HIREDATE              DATE
SAL                  NUMBER(7,2)
COMM                 NUMBER(7,2)
DEPTNO               NUMBER(2)
```

You want to create two procedures using the overloading feature to search for employee details based on either the employee name or employee number. Which two rules should you apply to ensure that the overloading feature is used successfully? (Choose two.)

- A. The procedures can be either stand-alone or packaged.
- B. The procedures should be created only as packaged subprograms
- C. The procedures should be created only as stand-alone subprograms
- D. Each subprogram's formal parameters should differ in both name and data type.
- E. The formal parameters of each subprogram should differ in data type but can use the same names.

Answer: B, E

Question: 15

Which two statements are true about the instead of triggers' (choose two.)

- A. Delete operations cannot be performed using the instead of triggers.
- B. The instead of triggers must be created to add or modify data through any view.
- C. The instead of triggers can be written only for views, and the before and after timing options are not valid.
- D. The check option for views is not enforced when insertions or updates to the view are performed by using the instead of trigger.

Answer: B, C

Question: 16

Which two statements are correct about the usage of parameters in functions? (Choose two.)

- A. Functions can have only in mode parameters.
- B. Functions called in SQL statements cannot have out or in out mode parameters.
- C. Functions having in, out, or in out parameters can be called only in named PL/SQL subprograms
- D. Functions having in, out, or in out parameters can be called in PL/SQL procedures and anonymous blocks.

Answer: B, D

Question: 17

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

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(6)
FIRST_NAME		VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2(10)
SALARY		NUMBER(8,2)
COMMISSION_PCT		NUMBER(2,2)
MANAGER_ID		NUMBER(6)
DEPARTMENT_ID		NUMBER(4)

Examine the following block of code:

```
SQL>DECLARE
2     v_sal NUMBER;
3     v_name VARCHAR2(30);
4     v_tenure NUMBER;
5     v_hire_date DATE;
6 BEGIN
7     SELECT AVG(salary) INTO v_sal FROM employees;
8     SELECT hire_date,DECODE(salary, v_sal, last_name,'NA')
9           INTO v_hire_date,v_name
10          FROM employees
11          WHERE employee_id = 195;
12     v_tenure := MONTHS_BETWEEN(CURRENT_DATE,v_hire_date);
13 END;
/
```

What is the outcome when the above code is executed?

- A. It executes successfully.
- B. It gives an error because decode cannot be used in a PL/SQL block.
- C. It gives an error because the AVG function cannot be used in a PL/SQL block.
- D. It gives an error because the MONTHS_BETWEEN function cannot be used in a PL/SQL block.
- E. It gives an error because both the AVG and decode functions cannot be used in a PL/SQL block.

Answer: A

Question: 18

Examine the following code:

```
CREATE OR REPLACE FUNCTION f2 (p_p1 NUMBER)
  RETURN NUMBER PARALLEL_ENABLE IS
BEGIN
  RETURN p_p1 * 2;
END f2;
```

Which two statements are true about the above function? (Choose two.)

- A. It can be used only in a parallelized query.
- B. It can be used in both a parallelized query and a parallelized DML statement.
- C. It can be used only in a parallelized data manipulation language (DML) statement.
- D. It can have a separate copy run in each of the multiple processes when called from a SQL statement that is run in parallel.
- E. It requires a PRAGMA RESTRICT_REFERENCES declaration with RNDS, WNDS, RNPS, and WNPS specified in order to use parallel optimization.

Answer: B, E

Question: 19

/temp/my_files is an existing folder in the server, facultylist.txt is an existing text file in this folder

Examine the following commands that are executed by the DBA:

SQL>CREATE DIRECTORY my_dir AS '/temp/my_files':

SQL>GRANT READ ON DIRECTORY my_dir To public:

View the Exhibit and examine the procedure created by user SCOTT to read the list of faculty names from the text file.

```
CREATE OR REPLACE PROCEDURE read_file (dirname VARCHAR2, txtfile VARCHAR2) IS
  f_file UTL_FILE.FILE_TYPE;
  v_buffer VARCHAR2(200);
BEGIN
  f_file := UTL_FILE.FOPEN (dirname, txtfile, 'R');
  LOOP
    UTL_FILE.GET_LINE(f_file, v_buffer);
    DBMS_OUTPUT.PUT_LINE(v_buffer);
  END LOOP;
  UTL_FILE.FCLOSE(f_file);
END read_file;
```


SCOTT executes the procedure as follows:

SQL>SET SERVEROUTPUT ON

SQL>EXEC read_file ('MY_DIR', FACULTYLIST.TXT')

What is the outcome?

- A. It goes into an infinite loop.
- B. It executes successfully and displays only the list of faculty names.
- C. It does not execute and displays an error message because the end-of-file condition is not taken care of.
- D. It executes successfully and displays the list of faculty names followed by a "no data found" error message.

Answer: B

Question: 20

View the Exhibit to examine the PL/SQL block.

```
DECLARE
  TYPE population IS TABLE OF NUMBER
    INDEX BY VARCHAR2(64);
  city_population population;
  i VARCHAR2(64);
BEGIN
  city_population('Smallville') := 2000;
  city_population('Midland') := 750000;
  city_population('Megalopolis') := 1000000;
  city_population('Smallville') := 2001;
  i := city_population.FIRST;
  WHILE i IS NOT NULL LOOP
    DBMS_Output.PUT_LINE('Population of ' || i || ' is ' || TO_CHAR(city_population(i)));
    i := city_population.NEXT(i);
  END LOOP;
END;
```

Which two statements are true about the execution of the PL/SQL block? (Choose two.)

- A. It executes successfully and gives the desired output.
- B. It does not execute because the definition of type population is indexed by varchar2.
- C. It executes, and the string keys of an associative array are not stored in creation order, but in sorted order.
- D. It does not execute because the value that is once assigned to the element of the associative array cannot be changed.

Answer: A

Question: 21

User SCOTT has been granted CREATE ANY TRIGGER AND ALTER ANY TABLE by the DB

A. HR is an existing schema in the database.

SCOTT creates the following trigger:

```
CREATE OR REPLACE TRIGGER drop_trigger
```

```
BEFORE DROP ON hr.SCHEMA
```

```
BEGIN
```

```
RAISE_APPLICATION_ERROR (-20000, 'Cannot drop object');
```

```
END;
```

SCOTT does not grant the execute privilege on this trigger to any other users.

For which user(s) would this trigger fire by default when they drop an object in the hr schema?

A. Only HR

B. SCOTT and HR

C. Only SCOTT

D. SCOTT, HR, and SYS

Answer: A

Question: 22

Which two statements are true about the continue statement? (Choose two.)

A. The PL/SQL block execution terminates immediately.

B. The CONTINUE statement cannot appear outside a loop.

C. The loop completes immediately and control passes to the statement after end loop.

D. The statements after the continue statement in the iteration are executed before terminating the LOOP.

E. The current iteration of the loop completes immediately and control passes to the next iteration of the loop

Answer: B, E

Question: 23

View the Exhibit and examine the code and its outcome on execution:

```
SQL> CREATE PACKAGE my_debug IS
2   debug CONSTANT BOOLEAN := TRUE;
3   trace CONSTANT BOOLEAN := TRUE;
4 END my_debug;
5 /

Package created.

SQL> CREATE PROCEDURE my_proc1 IS
2 BEGIN
3   IF my_debug.debug THEN
4     DBMS_OUTPUT.put_line('Debugging ON');
5   ELSE
6     DBMS_OUTPUT.put_line('Debugging OFF');
7   END IF;
8 END my_proc1;
9 /

Procedure created.

SQL> CREATE PROCEDURE my_proc2 IS
2 BEGIN
3   IF my_debug.trace THEN
4     DBMS_OUTPUT.put_line('Tracing ON');
5   ELSE DBMS_OUTPUT.put_line('Tracing OFF');
6   END IF;
7 END my_proc2;
8 /

Procedure created.
```

What would be the effect on the two procedures if the value of debug is set to false? (Choose two.)

- A. MY_PROC2 is not recompiled.
- B. MY_PROC1 is recompiled but remains unchanged.
- C. MY_PROC2 is recompiled but remains unchanged.
- D. MY_PROC1 is recompiled without the debugging code.

Answer: A,D

Question: 24

View Exhibit1 and examine the structure of the DO table.

```
SQL> desc emp
```

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

View Exhibit2 and examine the code.

```
SQL>CREATE OR REPLACE FUNCTION job_chk ( p_empno NUMBER)
2   RETURN BOOLEAN IS
3   v_job emp.job%TYPE;
4   BEGIN
5       SELECT job INTO v_job FROM emp WHERE empno = p_empno;
6       IF v_job = 'SALESMAN' THEN
7           RETURN TRUE;
8       ELSE
9           RETURN FALSE;
10      END IF;
11  END job_chk;
/
SQL>DECLARE
2   v_job BOOLEAN;
3   dyn_stat VARCHAR2(200);
4   v_comm NUMBER := NULL;
5   v_empno emp.empno%TYPE;
6   BEGIN
7       dyn_stat := 'BEGIN :v_job := job_chk(100); END;';
8       EXECUTE IMMEDIATE dyn_stat USING OUT v_job;
9       IF v_job THEN
10          EXECUTE IMMEDIATE 'UPDATE emp SET comm = :x WHERE empno = :y'
11          USING v_comm, v_empno;
12      END IF;
13  END;
```


The anonymous block gives an error on execution. What is the reason?

- A. The assignment in line 7 is not valid.
- B. The SQL does not support the Boolean data type.
- C. A null value cannot be applied to the bind arguments in the using clause in line 10
- D. The names of bind variables must be the same as the using clause bind arguments in line 10

Answer: A

Question: 25

View the Exhibit and examine the structure of the departments table in SCOTT's schema.

Name	Null?	Type
-----	-----	-----
DEPARTMENT_ID	NOT NULL	NUMBER(4)
DEPARTMENT_NAME	NOT NULL	VARCHAR2(30)
MANAGER_ID		NUMBER(6)
LOCATION_ID		NUMBER(4)

Examine the following block of code:

```
CREATE OR REPLACE PROCEDURE add_dept(  
  p_id NUMBER, p_name VARCHAR2) IS  
BEGIN  
  INSERT INTO departments VALUES <p_id, p_name, NULL, NULL>;  
END;  
/
```

The above procedure is created by user SCOTT. Another user JONES needs to use the procedure.

Which two statements are true in the above scenario? (Choose two.)

- A. JONES executes the procedure with definer's rights.
- B. JONES executes the procedure with invoker's rights.
- C. SCOTT should grant only the execute privilege for the procedure to JONES.
- D. SCOTT should grant both the EXECUTE privilege for the procedure and insert privilege for the table to

Answer: A, C

Question: 26

Which two statements are true about statement-level and row-level triggers? (Choose two.)

- A. A row trigger fires once even if no rows are affected.
- B. A statement trigger fires once even if no rows are affected.
- C. Row triggers are useful if the trigger action depends on the data of rows that are affected or on data that is provided by the triggering event itself.
- D. Statement triggers are useful if the trigger action depends on the data of rows that are affected or on data that is provided by the triggering event itself.

Answer: B,C

Question: 27

Identify two features of obfuscation. (Choose two.)

- A. The Import and Export utilities accept wrapped files.
- B. SQL*Plus cannot process the obfuscated source files.
- C. Only the wrap utility can obfuscate multiple programs at a time.
- D. Both the DBMS_DDL package and the Wrap utility can obfuscate multiple programs at a time.
- E. The source code is visible only through the DBA_SOURCE view and not through the USER_SOURCE or ALL_SOURCE View

Answer: A, D

Question: 28

You create the following table and execute the following code:

```
SQL>CREATE TABLE emp_temp (deptno NUMBER(2), job VARCHAR2(18));
SQL>DECLARE
    TYPE NumList IS TABLE OF NUMBER;
    depts NumList := NumList(10, 20, 30);
BEGIN
    INSERT INTO emp_temp VALUES(10, 'Clerk');
    INSERT INTO emp_temp VALUES(20, 'Bookkeeper');
    INSERT INTO emp_temp VALUES(30, 'Analyst');
    FORALL j IN depts.FIRST..depts.LAST
        UPDATE emp_temp SET job = job || ' (Senior)'
        WHERE deptno = depts(j);
    EXCEPTION
    WHEN OTHERS THEN
        DBMS_OUTPUT.PUT_LINE ('Problem in the FORALL statement.');
```

COMMIT;

END;

/

Which statement is true about the outcome of the above code?

- A. It executes successfully and all the rows are updated.
- B. It gives an error but saves the inserted rows and the update to the first row.
- C. It gives an error but saves the inserted rows; however, no rows are updated.
- D. It gives an error and all the data manipulation language (DML) statements are rolled back

Answer: A

Question: 29

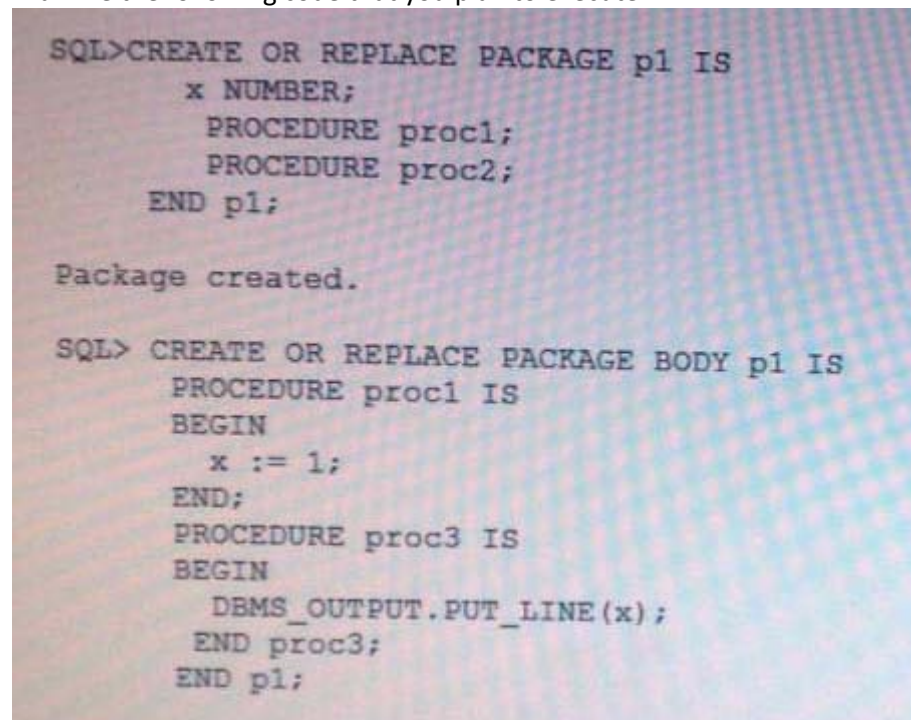
You want to create a trigger that fires whenever rows are deleted from the customer table and that displays the number of rows remaining in the table. Which two statements are correct about the trigger to be created for the above requirement? (Choose two.)

- A. It should be an after trigger.
- B. It should be a before trigger.
- C. It should be a row-level trigger.
- D. It should be a statement-level trigger.
- E. It can be a before or an after trigger.

Answer: A,C

Question: 30

Examine the following code that you plan to execute:

A screenshot of a SQL command window showing the creation of a package and its body. The first command creates the package 'p1' with two procedures, 'proc1' and 'proc2'. The output shows 'Package created.'. The second command creates the package body for 'p1', defining 'proc1' to set a variable 'x' to 1 and 'proc3' to output the value of 'x'.

```
SQL>CREATE OR REPLACE PACKAGE p1 IS
      x NUMBER;
      PROCEDURE proc1;
      PROCEDURE proc2;
END p1;

Package created.

SQL> CREATE OR REPLACE PACKAGE BODY p1 IS
      PROCEDURE proc1 IS
      BEGIN
        x := 1;
      END;
      PROCEDURE proc3 IS
      BEGIN
        DBMS_OUTPUT.PUT_LINE(x);
      END proc3;
END p1;
```

What correction should be performed in the above code?

- A. The PROC2 procedure code should be defined in the package body.
- B. The PROC3 procedure should be declared in the package specification.
- C. The PROC3 procedure header should be declared at the beginning of the package body.
- D. The variable x must be declared in the package body and removed from the specification,

Answer: A B

Question: 31

ORDER_TOTAL is a column in the orders table with the data type and size as number(8, 2) Examine the following code:

```
SQL> SET SERVEROUTPUT ON

SQL>DECLARE
  2   v_order_id      orders.order_id%TYPE;
  3   v_order_total   CONSTANT orders.order_total%TYPE := 1000;
  4   v_all_order_total v_order_total%TYPE;
  5 BEGIN
  6   v_order_id := NULL;
  7   DBMS_OUTPUT.PUT_LINE('Order Total is ' || v_order_total);
  8 END;
  /
```

Which statement is correct about the above code?

- A. It gives an error in line 3
- B. It gives an error in line 4
- C. It gives an error in line 6
- D. It executes successfully and displays the output.

Answer: D

Question: 32

View the Exhibit and examine the blocks of code that you plan to execute.
Which statement is true about the blocks of code?

```
CREATE OR REPLACE FUNCTION dfilt RETURN NUMBER IS
    cnt NUMBER := 0;
BEGIN
    cnt := cnt + 1;
    RETURN 45;
END dfilt;

CREATE OR REPLACE PROCEDURE p(i IN NUMBER DEFAULT dfilt()) IS
BEGIN
    DBMS_OUTPUT.PUT_LINE(1);
END p;

DECLARE
    cnt NUMBER := dfilt();
BEGIN
    FOR j IN 1..3 LOOP
        p(j);
    END LOOP;
    DBMS_OUTPUT.PUT_LINE('cnt: '||cnt);
    p();
    DBMS_OUTPUT.PUT_LINE('cnt: '||cnt);
END;
```

A. All the blocks execute successfully and the anonymous block displays

1

2

3

cnt: 45

45

cnt: 45

B. All the blocks execute successfully and the anonymous block displays

1

2

3

cut: 0

45

cart: 1

C. The anonymous block gives an error because the function invocation in line 2 is not valid.

D. The procedure creation gives an error because the function invocation in line 1 is not valid.

Answer: A

Question: 33

Which statement is true about triggers on data definition language (DDL) statements?

- A. They can be used to track changes only to a table or Index.
- B. They can be defined by all users in the database or only by a specific user.
- C. They are fired only when the owner of the object Issues the DDL statement.
- D. They can be used to track changes to a table, table space, view, or synonym.

Answer: A,B

Question: 34

Which two statements are correct about PL/SQL package components? (Choose two)

- A. A package must have both specification and body.
- B. A package body can exist without the package specification.
- C. A package specification can exist without the package body.
- D. When a packaged public variable is called for the first time in a session, the entire package is loaded into memory.

Answer: A,C

Question: 35

In which of the following scenarios would you recommend using associative arrays?

- A. when you want to retrieve an entire row from a table and perform calculations
- B. when you know the number of elements in advance and the elements are usually accessed sequentially
- C. when you want to create a separate lookup table with multiple entries for each row of the main table, and access it through join queries
- D. When you want to create a relatively small lookup table, where the collection can be constructed on memory each time a subprogram is invoked.

Answer: C,D

Question: 36

View Exhibit1 and examine the structure of the EMP table.

```
SQL> desc emp
```

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

View Exhibit2 and examine the code.

```
SQL>CREATE OR REPLACE PROCEDURE raise_salary (emp_id IN NUMBER,
2      amount IN NUMBER,extra IN NUMBER DEFAULT 50)
3 IS
4 BEGIN
5     UPDATE emp SET sal = sal + NVL(amount,0) + extra
6     WHERE empno = emp_id;
7 END raise_salary;
/

SQL>DECLARE
2   emp_num NUMBER(6) := 7900;
3   bonus   NUMBER(6);
4   merit   NUMBER(4);
5 BEGIN
6     raise_salary(7845);
7     raise_salary(emp_num, extra => 25);
8     raise_salary(7845,NULL, 25);
9     raise_salary(emp_num, extra => 25, amount => NULL);
10 END;
/
```

EKPNOS 7845 and 7900 exist in the EMP table.

Which two calls to the RAISE_SALABY procedure in the anonymous block execute successfully?
(Choose two.)

- A. call in line 6
- B. call in line 7
- C. call in line 8
- D. call in line 9

Answer: C,D

Question: 37

Examine the following code:

```
SQL>SET SERVEROUTPUT ON;
SQL>DECLARE
    v_myage number;
BEGIN
    IF v_myage < 11 THEN
        DBMS_OUTPUT.PUT_LINE(' I am a child ');
    ELSE
        DBMS_OUTPUT.PUT_LINE(' I am not a child ');
    END IF;
END;
```

Which statement is true about the execution of the above code?

- A. It executes and displays null.
- B. It executes and the condition returns true.
- C. It executes and control goes to the else statement.
- D. It fails because no value is assigned to the v_myage variable.

Answer: C

Question: 38

Which system events can be used to create triggers that fire both at database and schema levels?
(Choose all that apply)

- A. AFTER LOGON
- B. AFTER STARTUP
- C. BEFORE SHUTDOWN
- D. AFTER SERVERERROR

Answer: D

Question: 39

In which of the following scenarios would you recommend using PL/SQL records?

- A. when you want to retrieve an entire row from a table and perform calculations
- B. when you know the number of elements in advance and the elements are usually accessed sequentially
- C. when you want to create a separate lookup table with multiple entries for each row of the main table, and access it through join queries
- D. when you want to create a relatively small lookup table, where the collection can be constructed in memory each time a subprogram is invoked

Answer: C,D

Question: 40

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

Name	Null?	Type
-----	-----	-----
EMPLOYEE_ID	NOT NULL	NUMBER(6)
FIRST_NAME		VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2(10)
SALARY		NUMBER(8,2)
COMMISSION_PCT		NUMBER(2,2)
MANAGER_ID		NUMBER(6)
DEPARTMENT_ID		NUMBER(4)

Execute the following block of code:

```

SQL>DECLARE
  2  v_sum_sal NUMBER;
  3  department_id employees.department_id%TYPE := 60;
  4  BEGIN
  5      SELECT SUM(salary)
  6          INTO v_sum_sal FROM employees
  7          WHERE department_id = department_id;
  8  DBMS_OUTPUT.PUT_LINE ('The sum of salary is ' || v_sum_sal);
  9* END;
  /

```

What is the outcome?

- A. It gives an error because group functions cannot be used in anonymous blocks
- B. It executes successfully and correctly gives the result of the sum of salaries in department 60.
- C. It executes successfully and incorrectly gives the result of the sum of salaries in department 60.
- D. It gives an error because the variable name and column name are the same in the where clause of the select statement.

Answer: C

Question: 41

(exhibit not complete)

Examine the following snippet of PL/SQL code:

```

DECLARE
  emp_job      employees.job_id%TYPE := 'ST_CLERK';
  emp_salary   employees.salary%TYPE := 3000;
  my_record    employees%ROWTYPE;
  CURSOR c1 (job VARCHAR2, max_wage NUMBER) IS
    SELECT * FROM employees
      WHERE job_id = job
      AND salary > max_wage;
BEGIN

```

View the exhibit for table description of EMPLOYEES table. The EMPLOYEES table has 200 rows.

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
EMAIL	NOT NULL	VARCHAR2 (25)
PHONE_NUMBER		VARCHAR2 (20)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8, 2)
COMMISSION_PCT		NUMBER (2, 2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

Identify open statement for opening the cursor that fetches the result as consisting of employees with JOB_ID as 'ST_CLERK' and salary greater than 3000. (Choose all that apply)

- A. OPEN c1 (NULL, 3000);
- B. OPEN c1 (emp_job, 3000);
- C. OPEN c1 (3000, emp_salary);
- D. OPEN c1 ('ST_CLERK', 3000)
- E. OPEN c1 (EMP_job, emp_salary);

Answer: D

Question: 42

View the exhibit and examine the structure of the EMPLOYEES table

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8, 2)
COMMISSION_PCT		NUMBER (2, 2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

The salary of EMPLOYEE_ID 195 is 2800.

You execute the following code

```
SQL>SET SERVEROUTPUT ON
SQL>DECLARE
  2  v_sal NUMBER(10,2):= 1000;
  3  BEGIN
  4      DBMS_OUTPUT.PUT_LINE ('Salary is ' || v_sal);
  5      DECLARE
  6          v_sal NUMBER;
  7          BEGIN
  8              SELECT salary INTO v_sal FROM employees WHERE employee_id = 195;
  9              DBMS_OUTPUT.PUT_LINE ('Salary is ' || v_sal);
 10              DECLARE
 11                  v_sal NUMBER := 50000;
 12                  BEGIN <<b3>>
 13                      DBMS_OUTPUT.PUT_LINE ('Salary is ' || v_sal);
 14                  END b3;
 15              DBMS_OUTPUT.PUT_LINE ('Salary is ' || v_sal);
 16          END;
 17  END;
  /
```

What is the outcome?

- A. It gives an error because only the innermost block is labeled
- B. It gives an error because the same variable name cannot be used across all the nested blocks.
- C. It executes successfully and displays the resultant values in the following sequence- 1000, 2800 50000, 2800.
- D. It executes successfully and displays the resultant values in the following sequence: 1000, 2800, 50000, 1000.

Answer: C

Question: 43

Which two statements are true about the usage of the cursor for loops? (Choose two.)

- A. The cursor needs to be closed after the iteration is complete.
- B. The implicit open, fetch, exit, and close of the cursor happen.
- C. The record type must be explicitly declared to control the loop.
- D. The PL/SQL creates a record variable with the fields corresponding to the columns of the cursor result set.

Answer: B,D

Question: 44

Examine the following PL/SQL code:

```
DECLARE
  v_lname VARCHAR2(15);
BEGIN
  SELECT last_name INTO v_lname
  FROM employees
  WHERE first_name='John';
  IF v_lname IS NULL THEN
    DEMS_OUTPUT.PUT_LINE ('No Rows found');
  ELSE
    DEMS_OUTPUT.PUT_LINE ('John's last name is :'||v_lname);
  END IF;
END;
```

Which statement is true about the execution of the code if the query in the PL/SQL block returns no rows?

- A. The program abruptly terminates and an exception is raised.
- B. The program executes successfully and the output is No ROWS_FOUND.
- C. The program executes successfully and the query fetches a null value in the V_LNAME variable.
- D. Program executes successfully, fetches a NULL value in the V_LNAME variable and an exception is raised.

Answer: A

Question: 45

Consider the following scenario:

Local procedure A calls remote procedure B

Procedure A was compiled at 8 AM.

Procedure A was modified and recompiled at 9 AM.

Remote procedure B was later modified and recompiled at 11 AM.

The dependency mode is set to timestamp.

Which statement correctly describes what happens when procedure A is invoked at 1 PM?

- A. Procedure A is invalidated and recompiled immediately.
- B. There is no effect on procedure A and it runs successfully.
- C. Procedure B is invalidated and recompiled again when invoked.
- D. Procedure A is invalidated and recompiles when invoked the next time.

Answer: D

Question: 46

View the Exhibit to examine the PIVSQL block.

```
SQL> CREATE TABLE employees_temp (  
    empid NUMBER(6) NOT NULL PRIMARY KEY,  
    deptid NUMBER(6) CONSTRAINT c_employees_temp_deptid  
        CHECK (deptid BETWEEN 100 AND 200),  
    deptname VARCHAR2(30) DEFAULT 'Sales'  
);  
  
Table created.  
  
SQL> DECLARE  
    emprec employees_temp%ROWTYPE;  
BEGIN  
    emprec.empid := NULL;  
    emprec.deptid := 50;  
    DBMS_OUTPUT.PUT_LINE('emprec.deptname: ' || emprec.deptname);  
END;
```

Which statement is true about the output of the PL/SQL block?

- A. It executes and the Output is emprec.deptname:.
- B. It executes and the Output is emprec.deptname:Sales.
- C. It produces an error because NULL is assigned to the emprec.empid field in the record.
- D. It produces an error because the CHECK constraint is violated while assigning a value to the emprec.deptid field in the record.

Answer: A

Question: 47

Examine the following snippet of code from the DECLARE section of PL/SQL

DECLARE

Cut_name VARCHAR2 (20) NOT NULL := 'tom jones';

Same_name cust_name\TYPE;

Which statement is correct about the above snippets of code?

- A. The variable inherits only the data type from the CUST_NAME variable.
- B. The sake name variable inherits only the data type and default value from the CUST_NAME variable.
- C. The 3ake_nake variable inherits the data type, constraint, and default value from the CUST_NAME variable.
- D. The 3ake_nake variable inherits only the data type and constraint from the CUT_NAME variable resulting in an error

Answer: A,B

Question: 48

Examine the following package specification.

```
SQL>CREATE OR REPLACE PACKAGE emp_pkf IS  
PROCEDURE search_emp (empdet NUMBER);  
PROCEDURE search_emp (empdet DATE);  
PROCEDURE search_emp (empdet NUMBER); RETURN VARCHAR2  
PROCEDURE search_emp (empdet NUMBER); RETURN DATE  
END emp_pkg
```

The package is compiled successfully

Why would it generate an error at run tune?

- A. Because function can not be overload
- B. Because function can not differ only in runtime
- C. because all the functions and procedures In the package cannot have the same number of parameters with the same parameter name
- D. Because the search EMP (EMPDET NUMBER) procedure and the SEARCH_DEPT (EMPDET NUMBER) can not have identical parameter names and data types

Answer: B

Question: 49

Which two statements are true about PL/SQL exception propagation? (Choose two.)

- A. The exception reproduces itself In successive enclosing blocks until a handler is found.
- B. Exception- can propagate across the remote subprograms that are called through database links.
- C. If you declare a local exception in a subblock and a global exception in the outer block, the local declaration overrides the global exception.
- D. If you declare a local exception in a subblock and a global exception in the outer block, the global declaration overrides the local exception.

Answer: A, C

Question: 50

Which tasks must be performed during the installation of the UTL_MAIL package?
(Choose all that apply.)

- A. setting the UTL_FILE_DIR initialization parameter
- B. running the UTLMAIL.SQL and prvtmail.plb scripts
- C. setting the SMTP_OUT_SERVER initialization parameter
- D. using the CREATE DIRECTORY statement to associate an alias with an operating system directory
- E. granting read and WRITE privileges to control the type of access to files in the operating system

Answer: B,C

Question: 51

You want to maintain an audit of the date and time when each user of the database logs off.
Examine the following code:

```
SQL>CREATE TABLE log_trig_table(  
user_id VARCHAR2(30),  
log_date TIMESTAMP,  
action VARCHAR2(40));  
  
SQL>CREATE OR REPLACE TRIGGER logoff_trig  
_____  
_____  
BEGIN  
INSERT INTO log_trig_table(user_id,log_date,action)  
VALUES (USER, SYSDATE, 'Logging off');  
END;
```

Which two clauses should be used to fill in the blanks and complete the above code?
(Choose two.)

- A. ON SCHEMA
- B. ON QRXABASE
- C. AFTER LOGOFF
- D. BEFORE LOGOFF

Answer: D

Question: 52

View Exhibit1 and examine the structure of the product table.

Name	Null?	Type
PROD_ID	NOT NULL	NUMBER(6)
PROD_NAME	NOT NULL	VARCHAR2(50)
PROD_LIST_PRICE	NOT NULL	NUMBER(8,2)
PROD_VALID		VARCHAR2(1)

View Exhibit2 and examine the procedure you created. The procedure uses the prod id to determine whether the list price is within a given range.

```
CREATE OR REPLACE PROCEDURE check_price (p_prod_id NUMBER) IS
  v_price product.prod_list_price%type;
BEGIN
  SELECT prod_list_price INTO v_price
  FROM product
  WHERE prod_id = p_prod_id;
  IF v_price NOT BETWEEN 20 AND 30 THEN
    RAISE_APPLICATION_ERROR(-20100,'Price not in range');
  END IF;
END;
```

You then create the following trigger on the product table.

```
CREATE OR REPLACE TRIGGER check_price__trg
BEFORE INSERT OR UPDATE OF prod_id, prod_list_price
ON product FOR EACH ROW
WHEN (nev.prod_id <> NVX(old.prod_id,0) OR
New.prod__list_price <> NVL(old.prod_list_price, 0) )
BEGIN
  check_price (:new.prod_id);
END
/
```

Examine the following update command for an existing row in the product table.

```
SQL> UPDATE produce SET prod_list_price = 10 WHERE prod_id=115;
```

Why does it generate an error?

- A. because the procedure call in the trigger is not valid "
- B. because the condition specified in the when clause is not valid
- C. because both the procedure and trigger access the same table
- D. because the WHEN clause cannot be used with a row-level trigger
- E. because the column list specified with UPDATE in the trigger is not valid

Answer: B

Question: 53

View Exhibit1 and examine the structure of the employees table.

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(6)
FIRST_NAME		VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2(10)
SALARY		NUMBER(8,2)
COMMISSION_PCT		NUMBER(2,2)
MANAGER_ID		NUMBER(6)
DEPARTMENT_ID		NUMBER(4)

User SCOTT needs to generate a text report that contains the names of all employees and their salaries.

Examine the following commands issued by the DBA:

SQL_CREATE DIRECTORY my_dir AS '/temp/my_files*';

SQL_GRANT WRITE ON DIRECTORY my_dir TO SCOTT;

View Exhibit2 and examine the procedure code. You issue the following command:

```
CREATE OR REPLACE PROCEDURE sal_status(p_dir IN VARCHAR2,
                                         p_filename IN VARCHAR2) IS
    f_file UTL_FILE.FILE_TYPE;
    CURSOR cur_emp IS
        SELECT last_name,salary
        FROM employees ORDER BY salary;
    BEGIN
        f_file:= UTL_FILE.FOPEN (p_dir, p_filename, 'W');
        UTL_FILE.PUT_LINE(f_file,'REPORT: GENERATED ON ' || SYSDATE);
        FOR emp_rec IN cur_emp LOOP
            UTL_FILE.PUT_LINE (f_file,' EMPLOYEE: ' || emp_rec.last_name ||
                               ' earns: ' || emp_rec.salary);
        END LOOP;
        UTL_FILE.FCLOSE (f_file);
    EXCEPTION
        WHEN UTL_FILE.INVALID_FILEHANDLE THEN
            RAISE_APPLICATION_ERROR(-20001,'Invalid File.');
```

You issue the following command:

SQL_EXEC sal_5status ('MY_DIR', 'EMPREPORT.TXT')

What is the outcome?

- A. It executes successfully and creates the report.
- B. It gives an error because the text file should be opened in append mode.
- C. It gives an error because the "no data found" condition is not handled to come out of the loop.
- D. It gives an error because user SCOTT should be granted both read and write privileges to the directory alias.
- E. It executes but no data is written to the text file because the FFLUSH subprogram is not used to write all the data buffered in memory to a file.

Answer: A

Question: 54

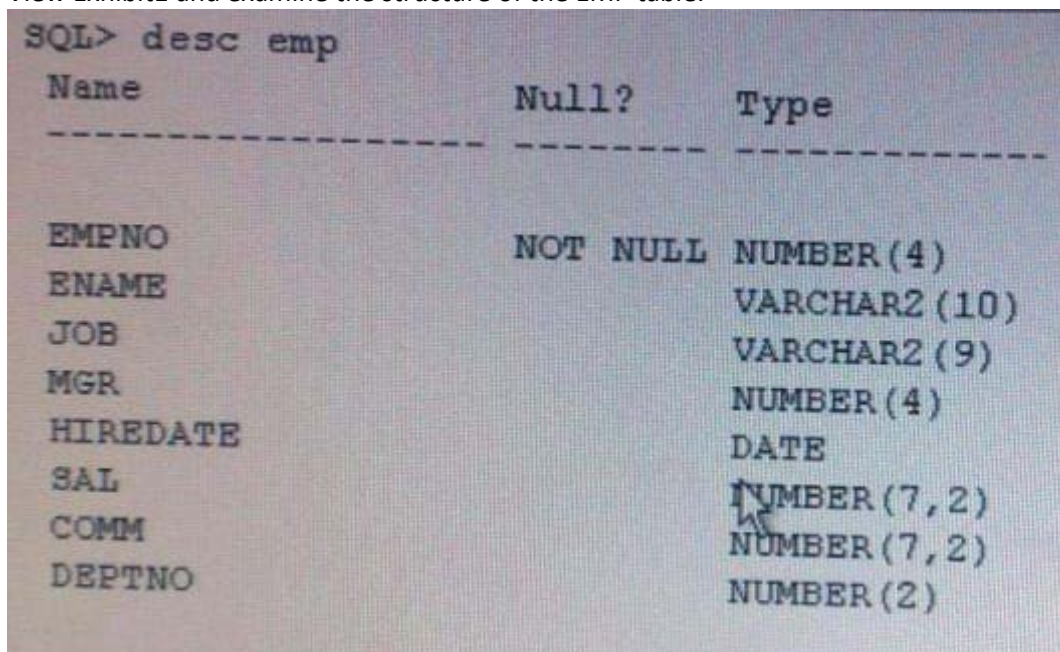
Which two statements are true about the handling of internally defined or user-defined PL/SQL exceptions? (Choose two.)

- A. Add exception handlers whenever errors occur.
- B. An exception handler should commit the transaction.
- C. Handle named exceptions whenever possible instead of using when others in exception handlers
- D. Instead of adding exception handlers to your PL/SQL block, check for errors at every point where they may occur.

Answer: C, D

Question: 55

View Exhibit1 and examine the structure of the EMP table.



```
SQL> desc emp
```

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

View Exhibit2 and examine the code created by the user SCOTT:


```

CREATE OR REPLACE PACKAGE curs_pkg IS
  PROCEDURE open;
  PROCEDURE next(p_n NUMBER := 1);
  PROCEDURE close;
END curs_pkg;
/

CREATE OR REPLACE PACKAGE BODY curs_pkg IS
  CURSOR cur_c IS
    SELECT empno FROM emp;
  PROCEDURE open IS
  BEGIN
    IF NOT cur_c%ISOPEN THEN
      OPEN cur_c;
    END IF;
  END open;
  PROCEDURE next(p_n NUMBER := 1) IS
    v_emp_id emp.empno%TYPE;
  BEGIN
    FOR count IN 1 .. p_n LOOP
      FETCH cur_c INTO v_emp_id;
      EXIT WHEN cur_c%NOTFOUND;
      DBMS_OUTPUT.PUT_LINE('Id: ' || (v_emp_id));
    END LOOP;
  END next;
  PROCEDURE close IS
  BEGIN
    IF cur_c%ISOPEN THEN
      CLOSE cur_c;
    END IF;
  END close;
END curs_pkg;
/

```

SCOTT grants the necessary privileges to green to access the EMP table and execute the package.

Examine the following sequence of activities:

SCOTT starts a session and issues the SQL>EXEC CURS_PKG.OPEN command.

SCOTT then issues the SQL>EXEC CURS_PKG.NEXT command.

green starts a session while SCOTT's session is running and issues THE SQL>EXEC CURS_PKG.NEXT command.

SCOTT issues the SQL>>EXEC SCOTT.CURS_PKG.NEXT command.

The EMP table contains sequential EMPNOS from 100 through 108.

Which statement correctly describes the output?

- A. SCOTT's session shows the EMPNO 100, GREEN'S session shows an error, and SCOTT's session shows an error.
- B. SCOTT's session shows the EMPNO 100, GREEN'S session shows EMPNO 100, and SCOTT's session shows the EMPNO 101.
- C. SCOTT's session shows the EMPNO 100, GREEN'S session shows an error, and SCOTT's session shows the second EMPNO 101.
- D. SCOTT's session shows the EMPNO 100, GREEN'S session shows EMPNO 101, and SCOTT's session shows the second EMPNO 102.

Answer: B

Question: 56

Which two statements correctly differentiate functions and procedures? (Choose two.)

- A. A function can be called only as part of a SQL statement, whereas a procedure can be called only as a PL/SQL statement.
- B. A function must return a value to the calling environment, whereas a procedure can return zero or more values to its calling environment.
- C. A function can be called as part of a SQL statement or PL/SQL expression, whereas a procedure can be called only as a PL/SQL statement.
- D. A function may return one or more values to the calling environment, whereas a procedure must return a single value to its calling environment.

Answer: C,B

Question: 57

View the Exhibits and examine the structure of the EMPLOYEES, DEPARTMENTS AND EMP_BY_DEPT tables.

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(6)
FIRST_NAME		VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2(10)
SALARY		NUMBER(8,2)
COMMISSION_PCT		NUMBER(2,2)
MANAGER_ID		NUMBER(6)
DEPARTMENT_ID		NUMBER(4)

EMPLOYEES

Name	Null?	Type
DEPARTMENT_ID	NOT NULL	NUMBER(4)
DEPARTMENT_NAME	NOT NULL	VARCHAR2(30)
MANAGER_ID		NUMBER(6)
LOCATION_ID		NUMBER(4)

DEPARTMENT

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(6)
DEPARTMENT_ID	NOT NULL	NUMBER(4)

EMP_BY_DEPT

```

DECLARE
  TYPE dept_tab IS TABLE OF departments.department_id%TYPE;
  deptnums dept_tab;
BEGIN
  SELECT department_id BULK COLLECT INTO deptnums FROM departments;
  FORALL i IN 1..deptnums.COUNT
    INSERT INTO emp_by_dept
      SELECT employee_id, department_id FROM employees
         WHERE department_id = deptnums(i);
  DBMS_OUTPUT.PUT_LINE(SQL%BULK_ROWCOUNT(deptnums.COUNT));
  DBMS_OUTPUT.PUT_LINE(SQL%ROWCOUNT);
END;
/

```

Examine the following code:

What is the outcome on execution of the above code?

- A. It executes successfully but the output statements show different values.
- B. It executes successfully and both output statements show the same values.
- C. It gives an error because the SQL%ROWCOUNT attribute cannot be used with BULK COLLECT.
- D. It gives an error because the INSERT SELECT construct cannot be used with the FORALL

Answer: A

Question: 58

Which two statements are true about triggers? (Choose two.)

- A. All the triggers that are created on a table cannot be disabled simultaneously.
- B. Any user who has the alter privilege on a table can create a trigger using that table.
- C. Oracle provides a two-phase commit process whether a trigger updates tables in the local database or remote tables in a distributed database.
- D. Triggers become invalid if a dependent object, such as a stored subprogram that is invoked from the trigger body is modified, and have to be manually recompiled before the next invocation.

Answer: C,D

Question: 59

Examine the following partial code:

```
CREATE OR REPLACE PACKAGE calc_income IS
    v_taxrate NUMBER := 100;
    PROCEDURE calc_tax(p_empno NUMBER);
    PROCEDURE calc_sal(p_empno NUMBER);
END calc_income;
/
CREATE OR REPLACE PACKAGE BODY calc_income IS
    PROCEDURE calc_tax(p_empno NUMBER)
    .....
END calc_tax;
    PROCEDURE calc_sal(p_empno NUMBER)
    .....
END calc_sal;
BEGIN
    SELECT rate_value INTO v_taxrate
    FROM tax_rates
    WHERE year = 2009;
END calc_income;
/
```

Which statement is correct about the unnamed block of code at the end of a package body?

- A. It generates an error because all the blocks of code in a package body must be named.
- B. It generates an error because V_TAXRATE is a public variable that is already initialized in the package specification.
- C. It acts as a package initialization block that executes once, when the package is first invoked within the user session.
- D. It acts as a package initialization block that executes each time a package subprogram is invoked within the user session and refreshes the initialized variable value.

Answer: A

Question: 60

Which two statements are true about the %ROWTYPE attribute? (Choose two.)

- A. It is used to declare a record that can hold multiple rows of a table.
- B. The attributes of fields in the record with the %ROWTYPE attribute can be modified manually.
- C. The attributes of fields in the record take their names and data types from the columns of the table, view, cursor, or cursor variable.
- D. It ensures that the data types of the variables that are declared with the %ROWTYPE attribute change dynamically when the underlying table is altered.

Answer: C,D

Question: 61

You want to store values of different data types in a PL/SQL block and store one record at a time for processing the information.

Which type of composite data type would you choose to fulfill the requirement?

- A. VARRAYS
- B. Nested table
- C. PL/SQL records
- D. Associative arrays

Answer: C

Question: 62

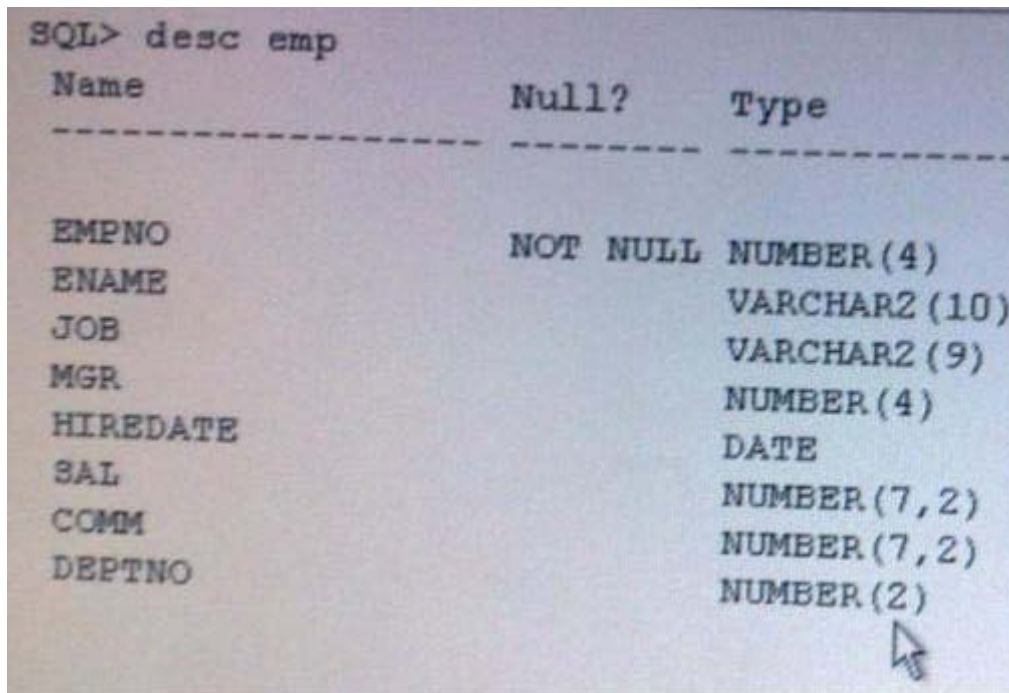
Which type of exceptions is qualified as no predefined Oracle server errors?

- A. the exceptions that are explicitly raised by the program and can be caught by the exception handler
- B. the exceptions that are raised implicitly by the Oracle server and can be caught by the exception handler
- C. an exception that the developer determines as abnormal, are in the declarative section and raised explicitly
- D. an exception that is raised automatically when the PL/SQL program violates a database rule or exceeds a system-dependent limit

Answer: C

Question: 63

View Exhibit 1 and examine the structure of the EMP table.



The image shows a screenshot of a SQL*Plus session. The command 'SQL> desc emp' has been entered. The output displays the table structure with columns: Name, Null?, and Type. The columns listed are EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, and DEPTNO. The nullability and data types are as follows: EMPNO is NOT NULL NUMBER(4), ENAME is VARCHAR2(10), JOB is VARCHAR2(9), MGR is NUMBER(4), HIREDATE is DATE, SAL is NUMBER(7,2), COMM is NUMBER(7,2), and DEPTNO is NUMBER(2). A mouse cursor is visible at the bottom right of the output.

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

View Exhibit2 and examine the code of the packages that you have created.


```

CREATE OR REPLACE PACKAGE manage_emp IS
    v_empno NUMBER;
    PROCEDURE del_emp (p_empno NUMBER);
END manage_emp;
/

CREATE OR REPLACE PACKAGE BODY manage_emp IS
    PROCEDURE del_emp (p_empno NUMBER) IS
    BEGIN
        DELETE FROM emp WHERE empno=p_empno;
    END del_emp;
END manage_emp;
/

CREATE OR REPLACE PACKAGE emp_det IS
    PROCEDURE emp_chk(p_empno NUMBER);
END emp_det;
/

CREATE OR REPLACE PACKAGE BODY emp_det IS
    PROCEDURE emp_chk(p_empno NUMBER) IS
    BEGIN
        manage_emp.del_emp(p_empno);
    END emp_chk;
END emp_det;
/

```

You issue the following command:

SQL> DROP PACKAGE manage_emp;

What is the outcome?

- A. It drops both the MANAGE_EMP AND EMP__DET packages because of the cascading effect.
- B. It drops the MANAGE_EMP package and invalidates only the body for the EMP_DET package.
- C. It returns an error and does not drop the MAMAGE_EMP package because of the cascading effect.
- D. It drops the MANAGE_EMP package and invalidates both the specification and body for the EMP_DET package.

Answer: B

Question: 64

Examine the following PL/SQL code:

```

DECLARE
    CURSOR c1 IS SELECT last_name FROM employees ORDER BY last_name;
    name1 employees.last_name%TYPE;
    name2 employees.last_name%TYPE;
    name3 employees.last_name%TYPE;
BEGIN
    OPEN c1;
    FETCH c1 INTO name1;
    FETCH c1 INTO name2;
    FETCH c1 INTO name3;
    CLOSE c1;
END;
/

```

Which statement is true about the fetch statements in the PL/SQL code?

- A. Each fetch retrieves the first row and assigns values to the target variables.
- B. Each fetch retrieves the next consecutive row and assigns values to the target variables.
- C. They produce an error because you must close and reopen the cursor before each fetch - statement
- D. Only the first fetch retrieves the first row and assigns values to the target variables- the second produces an error.

Answer: B

Question: 65

View Exhibit1 and examine the structure of the employees table.

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(6)
FIRST_NAME		VARCHAR2(20)
LAST_NAME	NOT NULL	VARCHAR2(25)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2(10)
SALARY		NUMBER(8,2)
COMMISSION_PCT		NUMBER(2,2)
MANAGER_ID		NUMBER(6)
DEPARTMENT_ID		NUMBER(4)

View Exhibit2 and examine the code.

```

CREATE OR REPLACE FUNCTION increase (emp_num NUMBER)
RETURN number IS
inc_amt NUMBER;
sal NUMBER;
BEGIN
SELECT salary INTO sal FROM employees WHERE employee_id = emp_num;
inc_amt := sal * .10;
RETURN inc_amt;
END increase;
/
CREATE OR REPLACE PROCEDURE calc_sal IS
emp_num NUMBER(6) := 120;
amt NUMBER := 0;
PROCEDURE raise_salary (emp_id NUMBER) IS
BEGIN
amt := increase(emp_num);
UPDATE employees SET salary = salary + amt
WHERE employee_id = emp_id;
END raise_salary;
BEGIN
raise_salary(emp_num);
END calc_sal;
/

```

What is the outcome when the code is executed?

- A. Both blocks compile and execute successfully when called.
- B. Both blocks compile successfully but the CALC_SAL procedure gives an error on execution.
- C. The CALC_SAL procedure gives an error on compilation because the amt variable should be declared in the RAISE_SALARY procedure.
- D. The CALC_SAL procedure gives an error on compilation because the RAISE_SALARY procedure cannot call the stand-alone increase function.

Answer: A

Question: 66

Examine the following PL/SQL code:

```
DECLARE
  CURSOR c_emp_cursor IS
    SELECT employee_id, last_name FROM employees
    WHERE department_id = 30;
BEGIN
  FOR emp_record IN c_emp_cursor
  LOOP
    DBMS_OUTPUT.PUT_LINE( emp_record.employee_id || ' ' || emp_record.last_name);
  END LOOP;
END;
```

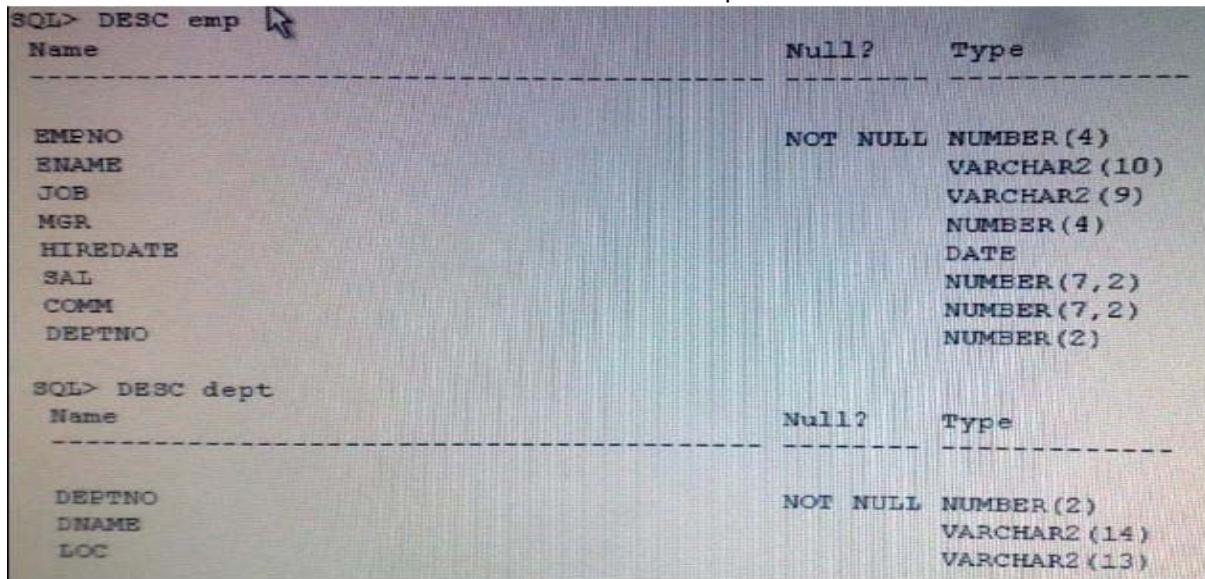
The server output is on for the session. Which statement is true about the execution of the code?

- A. The code executes successfully and gives the desired output.
- B. The code generates an error because the EMP_RECORD variable is not declared.
- C. The code generates an error because the cursor is not opened before the FOR loop.
- D. The code generates an error because the loop does not have the exit when clause.

Answer: A

Question: 67

View Exhibit 1 and examine the structure of the EMP and dept tables.

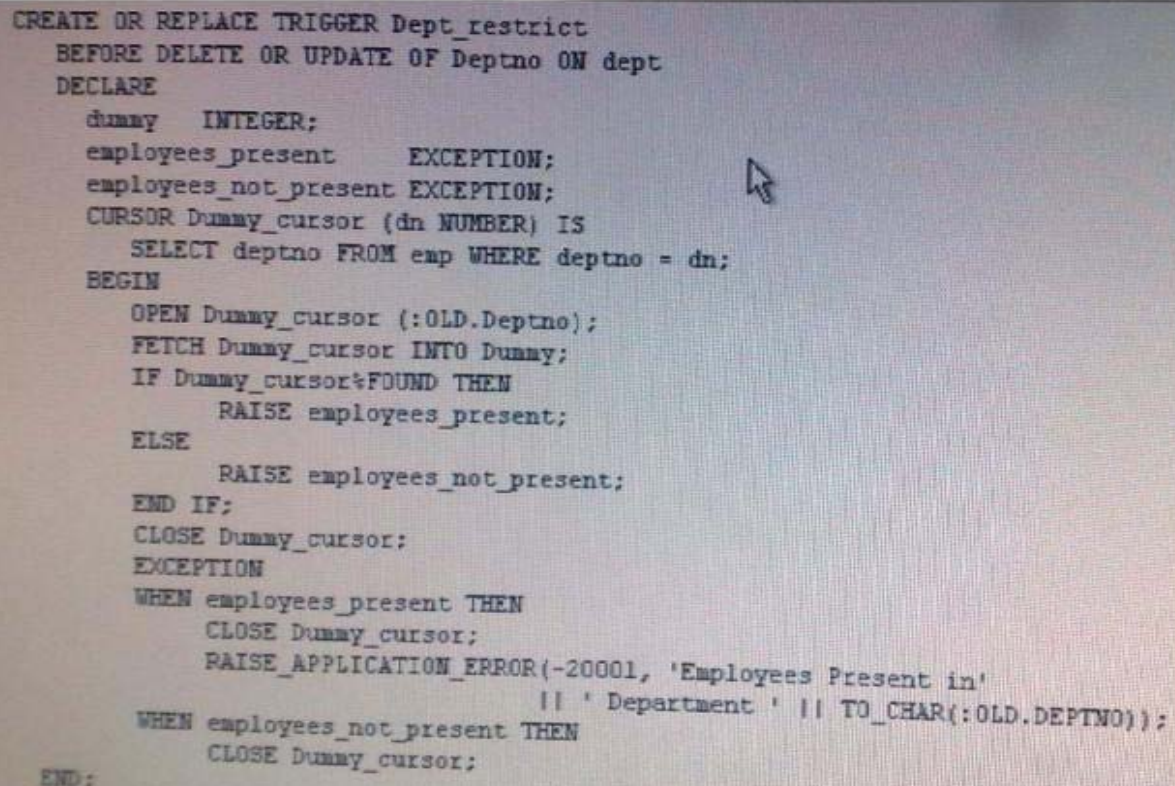


The screenshot shows two SQL*Plus queries. The first query, 'SQL> DESC emp', displays the structure of the EMP table. The second query, 'SQL> DESC dept', displays the structure of the DEPT table.

Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL		NUMBER(7,2)
COMM		NUMBER(7,2)
DEPTNO		NUMBER(2)

Name	Null?	Type
DEPTNO	NOT NULL	NUMBER(2)
DNAME		VARCHAR2(14)
LOC		VARCHAR2(13)

View Exhibit2 and examine the trigger code that is defined on the dept table to enforce the update and delete restrict referential actions on the primary key of the dept table.



```
CREATE OR REPLACE TRIGGER Dept_restrict
BEFORE DELETE OR UPDATE OF Deptno ON dept
DECLARE
    dummy INTEGER;
    employees_present EXCEPTION;
    employees_not_present EXCEPTION;
    CURSOR Dummy_cursor (dn NUMBER) IS
        SELECT deptno FROM emp WHERE deptno = dn;
BEGIN
    OPEN Dummy_cursor (:OLD.Deptno);
    FETCH Dummy_cursor INTO Dummy;
    IF Dummy_cursor%FOUND THEN
        RAISE employees_present;
    ELSE
        RAISE employees_not_present;
    END IF;
    CLOSE Dummy_cursor;
EXCEPTION
    WHEN employees_present THEN
        CLOSE Dummy_cursor;
        RAISE_APPLICATION_ERROR(-20001, 'Employees Present in'
                                || ' Department ' || TO_CHAR(:OLD.DEPTNO));
    WHEN employees_not_present THEN
        CLOSE Dummy_cursor;
END;
```

What is the outcome on compilation?

- A. It compiles and executes successfully.
- B. It gives an error on compilation because it is not a row-level trigger.
- C. It gives an error on compilation because the exception section is used in the trigger.
- D. It compiles successfully but gives an error on execution because it is not a row-level trigger.

Answer: B

Question: 68

Which two statements are true about the PL/SQL initialization parameters? (Choose two.)

- A. To use native code compilation, PLSQL_OPTIMIZE_LEVEL should be set to a value less than or equal to 1.
- B. The default value of 2 for PLSQL_OPTIMIZE_LEVEL allows the compiler to rearrange code for better performance.
- C. Setting PLSQL_CODE_TYPE to native provides the greatest performance gains only for computation-intensive procedural operations.
- D. Changing the value of the PLSQL_CODE_TYPE parameter affects all the PL/SQL library units that have already been compiled

Answer: A, C

Question: 69

Which two statements are true about anonymous blocks and named subprograms?
(Choose two)

- A. Subprograms are by default executed with definer's rights.
- B. The declare section is optional for both anonymous blocks and subprograms.
- C. Both anonymous blocks and subprograms execute by default with invoker's rights.
- D. The declare section is mandatory for anonymous blocks and optional for subprograms.

Answer: A,D

Question: 70

View the Exhibit to examine the PL/SQL code.

```
DECLARE
    past_due EXCEPTION;
    acct_num NUMBER;
BEGIN
    DECLARE
        past_due EXCEPTION;
        acct_num NUMBER;
        due_date DATE := SYSDATE - 1;
        todays_date DATE := SYSDATE;
    BEGIN
        IF due_date < todays_date THEN
            RAISE past_due;
        END IF;
    END;
EXCEPTION
    WHEN past_due THEN
        DBMS_OUTPUT.PUT_LINE
            ('Handling PAST_DUE exception.');
```

When OTHERS THEN
DBMS_OUTPUT.PUT_LINE
('Could not recognize exception.');

END;
/

Which statement is true about the execution of the code?

- A. The exception raised in the code is handled by the exception handler for the PAST_DUE exception.
- B. It does not execute because you cannot declare an exception with a similar name in the subblock.
- C. The PAST_DUE exception raised in the subblock causes the program to terminate abruptly because there is no exception handler in the subblock.
- D. The PAST_DUE exception raised by the enclosing block is not propagated to the outer block and it is handled by the WHEN OTHERS exception handler

Answer: C

Question: 71

Examine the following partial declare section from a block of PL/SQL code

```
SQL>DECLARE
2  v_wage  NUMBER  NOT NULL := 1000;
3  v_total_wages  v_wage%TYPE ;
4  work_complete  CONSTANT BOOLEAN :=TRUE;
5  all_work_complete  work_complete%TYPE ;
****
```

Which line(s) in the above code are NOT valid? (Choose all that apply.)

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

Answer: B,D

Question: 72

Which two guidelines are recommended by Oracle to reduce invalidation of dependent objects? (Choose two.)

- A. Reference tables indirectly by using views.
- B. Reference tables directly avoid using views.
- C. When adding new items to a package, add them to the end of the package.
- D. When adding new items to a package, add them to the beginning of the package.

Answer: B, C

Question: 73

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

```
SQL> desc salgrade
Name                Null?    Type
-----
GRADE               NOT NULL NUMBER
LOSAL                NUMBER
HISAL                NUMBER
```

Examine the following code:

```
SQL> VARIABLE min_sal NUMBER
SQL> VARIABLE max_sal NUMBER

SQL> CREATE OR REPLACE FUNCTION sal_ok(salary NUMBER, jobgrade NUMBER)
RETURN BOOLEAN AS
BEGIN
  SELECT losal, hisal INTO :min_sal, :max_sal FROM salgrade
  WHERE grade = jobgrade;
  RETURN (salary >= min_sal) AND (salary <= max_sal);
END sal_ok;
```

What is the outcome?

- A. It is created successfully.
- B. It gives an error because the return clause condition is invalid.
- C. It gives an error because the usage of the host variables is invalid.
- D. It gives an error because the data type of the return clause is invalid.

Answer: B

Question: 74

Examine the following code:

```
SQL>SET SERVEROUTPUT ON
SQL>DECLARE
2    date1 DATE := 'January 10, 2008';
3    date2 DATE := SYSDATE;
4    date_diff NUMBER ;
5 BEGIN
6    date_diff := date2 - date1;
7    DBMS_OUTPUT.PUT_LINE ('Difference in dates is ' || date_diff);
8 END;
/
```

The above code generates an error on execution.

What must you do to ensure that the code executes successfully?

- A. Use the TO_DATE function in line 2.
- B. Use the TO_DATE function in line 7.
- C. Use the TO_NUMBER function in line 6.
- D. Use both the TO_DATE function in line 2 and the TO_NUMBER function in line 6.

Answer: A

Question: 75

Identify situations in which the DBMS_SQL package is the only applicable method of processing dynamic SQL. (Choose all that apply.)

- A. When a query returns multiple rows
- B. When a column name in a where clause is unknown at compile time.
- C. When the number of columns selected in a query is not known until run time
- D. When a table needs to be created based on an existing table structure at run time
- E. When privileges need to be granted to a new user to access an existing schema at run time

Answer: B,C

Question: 76

Examine the following block of code:

```
CREATE OR REPLACE FUNCTION del_rows
(p_table_name VARCHAR2, p_empno NUMBER)
RETURN NUMBER IS
BEGIN
    EXECUTE IMMEDIATE 'DELETE FROM ' || p_table_name || ' WHERE empno = ' || p_empno;
    RETURN SQL%ROWCOUNT;
END;
/
Function created
```

Which two statements are correct about the code above? (Choose two.)

- A. The function goes through only the parse and executes phases.
- B. The function goes through the parse, bind, and execute phases.
- C. The function goes through the parse, bind, execute, and fetch phases.
- D. All the processing phases for the function are performed only at run time.
- E. Only the EXECUTE IMMEDIATE statement inside the function is parsed at run time.

Answer: D,E

Question: 77

Identify the scenario in which you would use the current of clause for an update or delete statement to rows fetched from a cursor.

- A. when you want to lock the rows fetched by the cursor
- B. when you want to update or delete the result set without affecting the rows in the table '
- C. when you want the database not to wait if the requested rows are locked by another user
- D. when you want to ensure that the current rows fetched by the cursor are updated or deleted

Answer: B

Question: 78

Examine the following code:

```
SQL> SET SERVEROUTPUT ON
SQL> VARIABLE n1 NUMBER
SQL> VARIABLE n2 NUMBER
SQL> CREATE OR REPLACE PROCEDURE proc1
    (:n1 IN OUT NUMBER, :n2 IN OUT NUMBER) IS
BEGIN
    :n1 := 20;
    DBMS_OUTPUT.put_line(:n1);
    :n2 := 30;
    DBMS_OUTPUT.put_line(:n2);
END;
```

What is the outcome?

- A. The procedure is created successfully and displays the values 20 and 30 when it is called.
- B. The procedure gives errors because the parameters should be in out mode.
- C. The procedure gives errors because the host variables cannot be referenced anywhere in the definition of a PL/SQL stored procedure.
- D. The procedure is created successfully but does not display any values when it is called because the host variables cannot be displayed inside the procedure.

Answer: A

Question: 79

Examine the following PL/SQL code:

```
DECLARE
    emp_rec employees%ROWTYPE;
BEGIN
    SELECT * INTO emp_rec FROM employees WHERE employee_id=123;
    IF SQL%NOTFOUND THEN
        DBMS_OUTPUT.PUT_LINE('Record Not found');
    ELSE
        DBMS_OUTPUT.PUT_LINE('Employee '||emp_rec.first_name||' '||
                               emp_rec.last_name||' Salary is '||emp_rec.salary);
    END IF;
END;
```

The server output is on for the session. Which statement is true about the execution of the code?

- A. It displays null if no employee with employee_id 123 exists.
- B. It produces the ora-01403: no data found error if no employee with employee_id 123 exists.
- C. It displays an error because the select into clause cannot be used to populate the PL/SQL record type.
- D. The code executes successfully even if no employee with employee_id 123 exists and displays Record Not Found.

Answer: B

Question: 80

Which statement is true about transactions in PL/SQL?

- A. A transaction can span multiple blocks.
- B. A block can contain only a single transaction.
- C. SERVERPOINTS cannot be created in a PL/SQL block.
- D. The END keyword signals the end of a PL/SQL block and automatically commits the transaction in the block.

Answer: A
