

<b>Exam Name:</b>	Oracle 9i Program With PL/SQL		
<b>Exam Type:</b>	Oracle		
<b>Exam Code:</b>	1Z0-147	<b>Total Questions:</b>	91

**Question: 1**

What can you do with the DBMS\_LOB package?

- A. Use the DBMS\_LOB.WRITE procedure to write data to a BFILE.
- B. Use the DBMS\_LOB.BFILENAME function to locate an external BFILE.
- C. Use the DBMS\_LOB.FILEEXISTS function to find the location of a BFILE.
- D. Use the DBMS\_LOB.FILECLOSE procedure to close the file being accessed.

**Answer: D**

**Question: 2**

Examine this procedure:

```
CREATE OR REPLACE PROCEDURE ADD_PLAYER
(V_ID IN NUMBER, V_LAST_NAME VARCHAR2)
IS
    BEGIN
        INSERT INTO PLAYER (ID, LAST_NAME)
        VALUES (V_ID, V_LAST_NAME);
        COMMIT;
    END;
```

This procedure must invoke the UPD\_BAT\_STAT procedure and pass a parameter. Which statement, when added to the above procedure, will successfully invoke the UPD\_BAT\_STAT procedure?

- A. EXECUTE UPD\_BAT\_STAT(V\_ID);
- B. UPD\_BAT\_STAT(V\_ID);
- C. RUN UPD\_BAT\_STAT(V\_ID);
- D. START UPD\_BAT\_STAT(V\_ID);

**Answer: B**

**Question: 3**

Which three describe a stored procedure? (Choose three.)

- A. A stored procedure is typically written in SQL.
- B. By default, a stored procedure executes with the privileges of its owner.
- C. A stored procedure has three parts: the specification, the body, and the exception handler part.
- D. A stored procedure is stored in the database and can be shared by a number of programs.
- E. A stored procedure offers some advantages over a standalone SQL statement, such as programmable functionality and compiled code.

**Answer: B, D, E**

**Question: 4**

Examine this package:

```
CREATE OR REPLACE PACKAGE pack_cur IS CURSOR c1 IS SELECT prodid FROM product
ORDER BY prodid DESC; PROCEDURE proc1; PROCEDURE proc2; END pack_cur; / CREATE
OR REPLACE PACKAGE BODY pack_cur IS v_prodid NUMBER; PROCEDURE proc1 IS
BEGIN OPEN c1; LOOP FETCH c1 INTO v_prodid; DBMS_OUTPUT.PUT_LINE('Row is: ' ||
c1%ROWCOUNT); EXIT WHEN c1%ROWCOUNT >= 3; END LOOP; END proc1;
PROCEDURE proc2 IS BEGIN LOOP FETCH c1 INTO v_prodid;
DBMS_OUTPUT.PUT_LINE('Row is: ' || c1%ROWCOUNT); EXIT WHEN c1%ROWCOUNT >=
6; END LOOP; CLOSE c1; END proc2; END pack_cur; /
```

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The product table has more than 1000 rows. The SQL\*Plus SERVEROUTPUT setting is turned on in your session. The product table has more than 1000 rows. The SQL\*Plus SERVEROUTPUT setting is turned on in your session. The product table has more than 1000 rows. The SQL\*Plus SERVEROUTPUT setting is turned on in your session. You execute the procedure PROC1 from SQL\*Plus with the command: EXECUTE pack\_cur.proc1 You execute the procedure PROC1 from SQL\*Plus with the command: EXECUTE pack\_cur.proc1 You execute the procedure PROC1 from SQL\*Plus with the command: EXECUTE pack\_cur.proc1 What is the output in your session? EXECUTE pack\_cur.proc1. What is the output in your session? What is the output in your session? A. ERROR at line 1: What is the output in your session? A. ERROR at line 1: A. ERROR at line 1: B. Row is:

- A. ERROR at line 1:
- B. Row is:
- C. Row is:
- D. Row is: Row is:
- E. Row is: 1 Row is:
- F. Row is: 1 Row is: 2
- G. Row is: 1 Row is: 2 Row is: 3
- H. Row is: 1 Row is: 2 Row is: 3 Row is: 2 Row is: 3
- I. Row is: 4
- J. Row is: 4 Row is: 5
- K. Row is: 4 Row is: 5 Row is: 6 Row is: 5 Row is: 6

**Answer: E, F, G, H**

**Question: 5**

Examine this procedure:

```
CREATE OR REPLACE PROCEDURE INSERT_TEAM
(V_ID in NUMBER, V_CITY in VARCHAR2 DEFAULT 'AUSTIN' V_NAME in VARCHAR2)
IS
BEGIN
INSERT INTO TEAM (id, city, name)
VALUES (v_id, v_city, v_name);
COMMIT;
END;
```

Which two statements will successfully invoke this procedure in iSQL\*Plus? (Choose two.)

- A. EXECUTE INSERT\_TEAM;
- B. EXECUTE INSERT\_TEAM(3, V\_NAME=&gt;'LONGHORNS', V\_CITY=&gt;'AUSTIN');
- C. EXECUTE INSERT\_TEAM(3,'AUSTIN','LONGHORNS');
- D. EXECUTE INSERT\_TEAM (V\_ID := 3, V\_NAME := 'LONGHORNS', V\_CITY := 'AUSTIN');
- E. EXECUTE INSERT\_TEAM (3,'LONGHORNS');

**Answer: B, C**

**Question: 6**

You need to create a DML trigger. Which five pieces need to be identified? (Choose five.)

- A. table
- B. DML event

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- C. trigger body
- D. package body
- E. package name
- F. trigger name
- G. system event
- H. trigger timing

**Answer: A, B, C, F, H**

**Question: 7**

This statement fails when executed:

```
CREATE OR REPLACE TRIGGER CALC_TEAM_AVG AFTER INSERT ON PLAYER BEGIN
INSERT INTO PLAYER_BAT_STAT (PLAYER_ID, SEASON_YEAR,AT_BATS,HITS) VALUES
(:NEW.ID, 1997, 0,0); END;
```

To which type must you convert the trigger to correct the error?

- A. row
- B. statement
- C. ORACLE FORM trigger
- D. before

**Answer: A**

**Question: 8**

Examine this package:

```
CREATE OR REPLACE PACKAGE discounts
IS
  g_id NUMBER := 7839;
  discount_rate NUMBER := 0.00;
  PROCEDURE display_price (p_price NUMBER);
END discounts;
/
CREATE OR REPLACE PACKAGE BODY discounts
IS
  PROCEDURE display_price (p_price NUMBER)
  IS
  BEGIN
    DBMS_OUTPUT.PUT_LINE('Discounted '||
      TO_CHAR(p_price*NVL(discount_rate, 1)));
  END display_price;
  BEGIN
    discount_rate := 0.10;
  END discounts;
/
```

Which statement is true?

- A. The value of DISCOUNT\_RATE always remains 0.00 in a session.
- B. The value of DISCOUNT\_RATE is set to 0.10 each time the package is invoked in a session.
- C. The value of DISCOUNT\_RATE is set to 1.00 each time the procedure DISPLAY\_PRICE is invoked.

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D. The value of DISCOUNT\_RATE is set to 0.10 when the package is invoked for the first time in a session.

**Answer: D**

**Question: 9**

Examine this code:

```
CREATE OR REPLACE PACKAGE comm_package
IS
  g_comm NUMBER := 10;
  PROCEDURE reset_comm(p_comm IN NUMBER);
END comm_package;
/
```

User Jones executes the following code at 9:01am:

```
EXECUTE comm_package.g_comm := 15
```

User Smith executes the following code at 9:05am:

```
EXECUTE comm_package.g_comm := 20
```

Which statement is true?

- A. g\_comm has a value of 15 at 9:06am for Smith.
- B. g\_comm has a value of 15 at 9:06am for Jones.
- C. g\_comm has a value of 20 at 9:06am for both Jones and Smith.
- D. g\_comm has a value of 15 at 9:03am for both Jones and Smith.
- E. g\_comm has a value of 10 at 9:06am for both Jones and Smith.
- F. g\_comm has a value of 10 at 9:03 for both Jones and Smith.

**Answer: B**

**Question: 10**

Examine this code:

```
CREATE OR REPLACE FUNCTION gen_email_name
(p_first_name VARCHAR2, p_last_name VARCHAR2, p_id NUMBER)
RETURN VARCHAR2
IS
  v_email_name VARCHAR2(19);
BEGIN
  v_email_name := SUBSTR(p_first_name, 1, 1) ||
                 SUBSTR(p_last_name, 1, 7) ||
                 '@Oracle.com';
  UPDATE employees
  SET   email = v_email_name
  WHERE employee_id = p_id;
  RETURN v_email_name;
END;
```

Which statement removes the function?

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- A. DROP gen\_email\_name;
- B. REMOVE gen\_email\_name;
- C. DELETE gen\_email\_name;
- D. TRUNCATE gen\_email\_name;
- E. DROP FUNCTION gen\_email\_name;
- F. ALTER FUNCTION gen\_email\_name REMOVE;

**Answer: E**

**Question: 11**

The add\_player , upd\_player\_stat , and upd\_pitcher\_stat procedures are grouped together in a package. A variable must be shared among only these procedures. Where should you declare this variable?

- A. in the package body
- B. in a database trigger
- C. in the package specification
- D. in each procedure's DECLARE section, using the exact same name in each

**Answer: A**

**Question: 12**

Examine this code:

```
CREATE OR REPLACE TRIGGER secure_emp
BEFORE LOGON ON employees
BEGIN
  IF (TO_CHAR(SYSDATE, 'DY') IN ('SAT', 'SUN')) OR
    (TO_CHAR(SYSDATE, 'HH24:MI')
      NOT BETWEEN '08:00' AND '18:00')
  THEN RAISE_APPLICATION_ERROR (-20500, 'You may
    insert into the EMPLOYEES table only during
    business hours. ');
  END IF;
END;
/
```

What type of trigger is it?

- A. DML trigger
- B. INSTEAD OF trigger
- C. application trigger
- D. system event trigger
- E. This is an invalid trigger.

**Answer: E**

**Question: 13**

What happens during the execute phase with dynamic SQL for INSERT, UPDATE, and DELETE operations?

- A. The rows are selected and ordered.
- B. The validity of the SQL statement is established.

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- C. An area of memory is established to process the SQL statement.
- D. The SQL statement is run and the number of rows processed is returned.
- E. The area of memory established to process the SQL statement is released.

**Answer: D**

**Question: 14**

Examine this package:

```

CREATE OR REPLACE PACKAGE manage_emp
IS
    tax_rate CONSTANT NUMBER(5,2) := .28;
    v_id NUMBER;
    PROCEDURE insert_emp (p_deptno NUMBER, p_sal NUMBER);
    PROCEDURE delete_emp;
    PROCEDURE update_emp;
    FUNCTION calc_tax (p_sal NUMBER)
        RETURN NUMBER;
END manage_emp;
/
CREATE OR REPLACE PACKAGE BODY manage_emp
IS
    PROCEDURE update_sal
        (p_raise_amt NUMBER)
    IS
    BEGIN
        UPDATE emp
            SET sal = (sal * p_raise_amt) + sal
            WHERE empno = v_id;
    END;
    PROCEDURE insert_emp
        (p_deptno NUMBER, p_sal NUMBER)
    IS
    BEGIN
        INSERT INTO emp(empno, deptno, sal)
            VALUES(v_id, p_deptno, p_sal);
    END insert_emp;
    PROCEDURE delete_emp
    IS
    BEGIN
        DELETE FROM emp
            WHERE empno = v_id;
    END delete_emp;
    PROCEDURE update_emp
    IS
        v_sal NUMBER(10, 2);
        v_raise NUMBER(10, 2);

```

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```

BEGIN
  SELECT sal
    INTO v_sal
   FROM emp
   WHERE empno = v_id;
  IF v_sal < 500 THEN
    v_raise := .05;
  ELSIF v_sal < 1000 THEN
    v_raise := .07;
  ELSE
    v_raise := .04;
  END IF;
  update_sal(v_raise);
END update_emp;
FUNCTION calc_tax
(p_sal NUMBER)
RETURN NUMBER
IS
BEGIN
  RETURN p_sal * tax_rate;
END calc_tax;
END manage_emps;
/

```

How many public procedures are in the MANAGE\_EMPS package?

- A. one
- B. two
- C. three
- D. four
- E. five
- F. none

**Answer: F**

**Question: 15**

You need to remove the database trigger BUSINESS\_HOUR. Which command do you use to remove the trigger in the SQL\*Plus environment?

- A. DROP TRIGGER business\_hour;
- B. DELETE TRIGGER business\_hour;
- C. REMOVE TRIGGER business\_hour;
- D. ALTER TRIGGER business\_hour REMOVE;
- E. DELETE FROM USER\_TRIGGERS WHERE TRIGGER\_NAME = 'BUSINESS\_HOUR';

**Answer: A**

**Question: 16**

Which three are valid ways to minimize dependency failure? (Choose three.)

- A. querying with the SELECT \* notation
- B. declaring variables with the %TYPE attribute

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- C. specifying schema names when referencing objects
- D. declaring records by using the %ROWTYPE attribute
- E. specifying package.procedure notation while executing procedures

**Answer: A, B, D**

**Question: 17**

Procedure PROCESS\_EMP references the table EMP. Procedure UPDATE\_EMP updates rows of table EMP through procedure PROCESS\_EMP. There is a remote procedure QUERY\_EMP that queries the EMP table through the local procedure PROCESS\_EMP. The dependency mode is set to TIMESTAMP in this session. Which two statements are true? (Choose two.)

- A. If the signature of procedure PROCESS\_EMP is modified and successfully recompiles, the EMP table is invalidated.
- B. If internal logic of procedure PROCESS\_EMP is modified and successfully recompiles, UPDATE\_EMP gets invalidated and will recompile when invoked for the first time.
- C. If the signature of procedure PROCESS\_EMP is modified and successfully recompiles, UPDATE\_EMP gets invalidated and will recompile when invoked for the first time.
- D. If internal logic of procedure PROCESS\_EMP is modified and successfully recompiles, QUERY\_EMP gets invalidated and will recompile when invoked for the first time.
- E. If internal logic of procedure PROCESS\_EMP is modified and successfully recompiles, QUERY\_EMP gets invalidated and will recompile when invoked for the second time.

**Answer: B, E**

**Question: 18**

You have a table with the following definition:

```
CREATE TABLE long_tab (id NUMBER, long_col LONG);
```

You need to convert the LONG\_COL column from a LONG data type to a LOB data type. Which statement accomplishes this task?

- A. ALTER TABLE long\_tab MODIFY (LONG\_COL CLOB);
- B. EXECUTE dbms\_lob.migrate(long\_tab, long\_col, clob)
- C. EXECUTE dbms\_manage.lob.migrate(long\_tab, long\_col, clob)
- D. EXECUTE utl\_lob.migrate(long\_tab, long\_col, clob)
- E. EXECUTE utl\_manage\_lob.migrate(long\_tab, long\_col, clob)

**Answer: A**

**Question: 19**

Examine this code:



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```

CREATE OR REPLACE FUNCTION gen_email_name
(p_first VARCHAR2, p_last VARCHAR2)
RETURN VARCHAR2
IS
  v_email_name VARCHAR2(19);
BEGIN
  v_email_name := SUBSTR(p_first, 1, 1) ||
                 SUBSTR(p_last, 1, 7) ||
                 '@Oracle.com';
  RETURN v_email_name;
END;
/

```

Which two statements are true? (Choose two.)

- A. This function is invalid.
- B. This function can be used against any table.
- C. This function cannot be used in a SELECT statement.
- D. This function can be used only if the two parameters passed in are not null values.
- E. This function will generate a string based on 2 character values passed into the function.
- F. This function can be used only on tables where there is a p\_first and p\_last column.

**Answer: B, E**

**Question: 20**

All users currently have the INSERT privilege on the PLAYER table. You only want your users to insert into this table using the ADD\_PLAYER procedure. Which two actions must you take? (Choose two.)

- A. GRANT SELECT ON ADD\_PLAYER TO PUBLIC;
- B. GRANT EXECUTE ON ADD\_PLAYER TO PUBLIC;
- C. GRANT INSERT ON PLAYER TO PUBLIC;
- D. GRANT EXECUTE,INSERT ON ADD\_PLAYER TO PUBLIC;
- E. REVOKE INSERT ON PLAYER FROM PUBLIC;

**Answer: B, E**

**Question: 21**

Examine this package:

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```

CREATE OR REPLACE PACKAGE pack_cur
IS
  CURSOR c1 IS
    SELECT  prodid
      FROM  product
      ORDER BY prodid DESC;
  PROCEDURE proc1;
  PROCEDURE proc2;
END pack_cur;
/

CREATE OR REPLACE PACKAGE BODY pack_cur
IS
  v_prodid NUMBER;
  PROCEDURE proc1 IS
  BEGIN
    OPEN c1;
    LOOP
      FETCH c1 INTO v_prodid;
      DBMS_OUTPUT.PUT_LINE('Row is: ' || c1%ROWCOUNT);
      EXIT WHEN c1%ROWCOUNT >= 3;
    END LOOP;
  END proc1;
  PROCEDURE proc2 IS
  BEGIN
    LOOP
      FETCH c1 INTO v_prodid;
      DBMS_OUTPUT.PUT_LINE('Row is: ' || c1%ROWCOUNT);
      EXIT WHEN c1%ROWCOUNT >= 6;
    END LOOP;
    CLOSE c1;
  END proc2;
END pack_cur;
/

```

The product table has more than 1000 rows. The SQL \*Plus SERVEROUTPUT setting is turned on in your session. You execute the procedure PROC1 from SQL\*Plus with the command: EXECUTE pack\_cur.PROC1; You then execute the procedure PROC2 from the SQL\*Plus with the command EXECUTE pack\_cur.PROC2; What is the output in your session from the PROC2 procedure?

- A. ERROR at line 1:
- B. Row is: Row is: Row is:
- C. Row is:1 Row is: 2 Row is: 3
- D. Row is: 4 Row is: 5 Row is: 6

**Answer: D**

**Question: 22**

Which two dictionary views track dependencies? (Choose two.)

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- A. USER\_SOURCE
- B. UTL\_DEPTREE
- C. USER\_OBJECTS
- D. DEPTREE\_TEMPTAB
- E. USER\_DEPENDENCIES
- F. DBA\_DEPENDENT\_OBJECTS

**Answer: D, E**

**Question: 23**

When creating a function, in which section will you typically find the RETURN keyword?

- A. HEADER only
- B. DECLARATIVE
- C. EXECUTABLE and HEADER
- D. DECLARATIVE, EXECUTABLE and EXCEPTION HANDLING

**Answer: C**

**Question: 24**

When creating stored procedures and functions, which construct allows you to transfer values to and from the calling environment?

- A. local variables
- B. arguments
- C. Boolean variables
- D. substitution variables

**Answer: B**

**Question: 25**

You have the following table:

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```
CREATE TABLE Emp_log (
    Emp_id      NUMBER,
    Log_date    DATE,
    New_salary  NUMBER,
    Action      VARCHAR2(20) );
```

You have the following data in the EMPLOYEES table:

EMPLOYEE_ID	LAST_NAME	SALARY	DEPARTMENT_ID
100	King	24000	90
101	Kochhar	17000	90
102	De Haan	17000	90
103	Hunold	9000	60
104	Ernst	6000	60
105	Austin	4800	60
106	Pataballa	4800	60
107	Lorentz	4200	60
108	Greenberg	12000	100
201	Hartstein	13000	20
202	Fay	6000	20

```
CREATE OR REPLACE TRIGGER Log_salary_increase
AFTER UPDATE ON employees
FOR EACH ROW
WHEN (new.Salary > 1000)
BEGIN
    INSERT INTO Emp_log (Emp_id, Log_date, New_salary, Action)
        VALUES (:new.Employee_id, SYSDATE, :new.SALary, 'NEW SAL');
END;
/
```

Then, you enter the following SQL statement:

```
UPDATE Employees SET Salary = Salary + 1000.0
WHERE Department_id = 20;
```

You create this trigger:

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A.

EMP_ID	LOG_DATE	NEW_SALARY	ACTION
201	24-SEP-02	13000	NEW SAL
202	24-SEP-02	6000	NEW SAL

B.

EMP_ID	LOG_DATE	NEW_SALARY	ACTION
201	24-SEP-02	14000	NEW SAL
202	24-SEP-02	7000	NEW SAL

C.

EMP_ID	LOG_DATE	NEW_SALARY	ACTION
201	24-SEP-02		NEW SAL
202	24-SEP-02		NEW SAL

What are the results in the EMP\_LOG table?

- A. picture
- B. picture
- C. picture
- D. No rows are inserted.

**Answer: B**

**Question: 26**

When using a packaged function in a query, what is true?

- A. The COMMIT and ROLLBACK commands are allowed in the packaged function.
- B. You can not use packaged functions in a query statement.
- C. The packaged function cannot execute an INSERT, UPDATE, or DELETE statement against the table that is being queried.
- D. The packaged function can execute an INSERT, UPDATE, or DELETE statement against the table that is being queried if it is used in a subquery.
- E. The packaged function can execute an INSERT, UPDATE, or DELETE statement against the table that is being queried if the pragma RESTRICT REFERENCES is used.

**Answer: C**

**Question: 27**

Which two tables or views track object dependencies? (Choose two).

- A. USER\_DEPENDENCIES
- B. USER\_IDEPTREE
- C. IDEPTREE
- D. USER\_DEPTREE
- E. USER\_DEPENDS

**Answer: A, C**

**Question: 28**

Which table should you query to determine when your procedure was last compiled?

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- A. USER\_PROCEDURES
- B. USER\_PROCS
- C. USER\_OBJECTS
- D. USER\_PLSQL\_UNITS

**Answer: C**

**Question: 29**

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

- A. Packages can be nested.
- B. You can pass parameters to packages.
- C. A package is loaded into memory each time it is invoked.
- D. The contents of packages can be shared by many applications.
- E. You can achieve information hiding by making package constructs private.

**Answer: D, E**

**Question: 30**

Which statement about triggers is true?

- A. You use an application trigger to fire when a DELETE statement occurs.
- B. You use a database trigger to fire when an INSERT statement occurs.
- C. You use a system event trigger to fire when an UPDATE statement occurs.
- D. You use an INSTEAD OF trigger to fire when a SELECT statement occurs.

**Answer: B**

**Question: 31**

Which two statements about the overloading feature of packages are true? (Choose two.)

- A. Only local or packaged subprograms can be overloaded.
- B. Overloading allows different functions with the same name that differ only in their return types.
- C. Overloading allows different subprograms with the same name number, type and order of parameters.
- D. Overloading allows different subprograms with the same name and same number or type of parameters.
- E. Overloading allows different subprograms with same name, but different in either number, type or order of parameters.

**Answer: A, E**

**Question: 32**

Examine this code:

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```

CREATE OR REPLACE FUNCTION calc_sal
(p_salary NUMBER)
RETURN NUMBER
IS
    v_raise NUMBER(4,2) DEFAULT 1.08;
BEGIN
    RETURN v_raise * p_salary;
END calc_sal;
/

```

Which statements accurately call the stored function CALC\_SAL ? (Choose two.)

- A. UPDATE employees (calc\_sal(salary)) SET salary = salary \* calc\_sal(salary);
- B. INSERT calc\_sal(salary) INTO employees WHERE department\_id = 60;
- C. DELETE FROM employees(calc\_sal(salary)) WHERE calc\_sal(salary) > 1000;
- D. SELECT salary, calc\_sal(salary) FROM employees WHERE department\_id = 60;
- E. SELECT last\_name, salary, calc\_sal(salary) FROM employees ORDER BY calc\_sal(salary);

**Answer: D, E**

**Question: 33**

Which part of a database trigger determines the number of times the trigger body executes?

- A. trigger type
- B. trigger body
- C. trigger event
- D. trigger timing

**Answer: A**

**Question: 34**

Examine the code examples.

Which one is correct?

- A. CREATE OR REPLACE TRIGGER authorize\_action BEFORE INSERT ON EMPLOYEES CALL log\_execution; /
- B. CREATE OR REPLACE TRIGGER authorize\_action BEFORE INSERT ON EMPLOYEES CALL log\_execution /
- C. CREATE OR REPLACE TRIGGER authorize\_action BEFORE EMPLOYEES INSERT CALL log\_execution;
- D. CREATE OR REPLACE TRIGGER authorize\_action CALL log\_execution BEFORE INSERT ON EMPLOYEES; /

**Answer: B**

**Question: 35**

Examine this code:

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```

CREATE OR REPLACE PROCEDURE audit_action
  (p_who VARCHAR2)
AS
BEGIN
  INSERT INTO audit(schema_user) VALUES(p_who);
END audit_action;
/

```

```

CREATE OR REPLACE TRIGGER watch_it
AFTER LOGON ON DATABASE
CALL audit_action(ora_login_user)
/

```

What does this trigger do?

- A. The trigger records an audit trail when a user makes changes to the database.
- B. The trigger marks the user as logged on to the database before an audit statement is issued.
- C. The trigger invokes the procedure audit\_action each time a user logs on to his/her schema and adds the username to the audit table.
- D. The trigger invokes the procedure audit\_action each time a user logs on to the database and adds the username to the audit table

**Answer: D**

**Question: 36**

You have an AFTER UPDATE row-level trigger on the table EMP. This trigger queries the EMP table and inserts the updating user's information into the AUDIT\_TABLE. What happens when the user updates rows on the EMP table?

- A. A compile time error occurs.
- B. A runtime error occurs. The effect of trigger body and the triggering statement are rolled back.
- C. A runtime error occurs. The effect of trigger body is rolled back, but the update on the EMP table takes place.
- D. The trigger fires successfully. The update on the EMP table occurs, and data is inserted into the AUDIT\_TABLE table.
- E. A runtime error occurs. The update on the EMP table does not take place, but the insert into the AUDIT\_TABLE occurs.

**Answer: B**

**Question: 37**

Examine this code:



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```

CREATE OR REPLACE PACKAGE metric_converter
IS
  c_height CONSTANT NUMBER := 2.54;
  c_weight CONSTANT NUMBER := .454;
  FUNCTION calc_height (p_height_in_inches NUMBER)
    RETURN NUMBER;
  FUNCTION calc_weight (p_weight_in_pounds NUMBER)
    RETURN NUMBER;
END;
/

```

```

CREATE OR REPLACE PACKAGE BODY metric_converter
IS
  FUNCTION calc_height (p_height_in_inches NUMBER)
    RETURN NUMBER
  IS
  BEGIN
    RETURN p_height_in_inches * c_height;
  END calc_height;
  FUNCTION calc_weight (p_weight_in_pounds NUMBER)
    RETURN NUMBER
  IS
  BEGIN
    RETURN p_weight_in_pounds * c_weight;
  END calc_weight;
END metric_converter;
/

```

```

CREATE OR REPLACE FUNCTION calc_height (p_height_in_inches NUMBER)
  RETURN NUMBER
  IS
  BEGIN
    RETURN p_height_in_inches * metric_converter.c_height;
  END calc_height;
/

```

Which statement is true?

- A. If you remove the package specification, then the package body and the stand alone stored function CALC\_HEIGHT are removed.
- B. If you remove the package body, then the package specification and the stand alone stored function CALC\_HEIGHT are removed.
- C. If you remove the package specification, then the package body is removed.
- D. If you remove the package body, then the package specification is removed.
- E. If you remove the stand alone stored function CALC\_HEIGHT, then the METRIC\_CONVERTER package body and the package specification are removed.
- F. The stand alone function CALC\_HEIGHT cannot be created because its name is used in a packaged function.

**Answer: C**

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**Question: 38**

Examine this code:

```
CREATE OR REPLACE STORED FUNCTION get_sal
(p_raise_amt NUMBER, p_employee_id employees.employee_id%TYPE)
RETURN NUMBER
IS
v_salary NUMBER;
v_raise NUMBER(8,2);
BEGIN
  SELECT salary
    INTO v_salary
   FROM employees
   WHERE employee_id = p_employee_id;
  v_raise := p_raise_amt * v_salary;
  RETURN v_raise;
END;
```

Which statement is true?

- A. This statement creates a stored procedure named get\_sal.
- B. This statement returns a raise amount based on an employee id.
- C. This statement creates a stored function named get\_sal with a status of invalid.
- D. This statement creates a stored function named get\_sal.
- E. This statement fails.

**Answer: E**

**Question: 39**

Why do you use an INSTEAD OF trigger?

- A. to perform clean up actions when ending a user session
- B. to insert data into a view that normally does not accept inserts
- C. to insert into an audit table when data is updated in a sensitive column
- D. to modify data in which the DML statement has been issued against an inherently non-updateable view

**Answer: D**

**Question: 40**

Given a function CALCTAX: : CREATE OR REPLACE FUNCTION calctax (sal NUMBER) RETURN NUMBER IS BEGIN RETURN (sal \* 0.05); END; If you want to run the above function from the SQL\*Plus prompt, which statement is true?

- A. You need to execute the command CALCTAX(1000); .
- B. You need to execute the command EXECUTE FUNCTION calctax; .
- C. You need to create a SQL\*Plus environment variable X and issue the command :X := CALCTAX(1000); .
- D. You need to create a SQL\*Plus environment variable X and issue the command EXECUTE :X := CALCTAX; .
- E. You need to create a SQL\*Plus environment variable X and issue the command EXECUTE :X := CALCTAX(1000);

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**Answer: E**

**Question: 41**

Examine the trigger:

```
CREATE OR REPLACE TRIGGER Emp_count
AFTER DELETE ON Emp_tab
FOR EACH ROW
DECLARE
    n INTEGER;
BEGIN
    SELECT COUNT(*)
    INTO n
    FROM Emp_tab;
    DBMS_OUTPUT.PUT_LINE(' There are now ' || n ||
        ' employees. ');
END;
```

This trigger results in an error after this SQL statement is entered:  
DELETE FROM Emp\_tab WHERE Empno = 7499;  
How do you correct the error?

- A. Change the trigger type to a BEFORE DELETE.
- B. Take out the COUNT function because it is not allowed in a trigger.
- C. Remove the DBMS\_OUTPUT statement because it is not allowed in a trigger.
- D. Change the trigger to a statement-level trigger by removing FOR EACH ROW.

**Answer: D**

**Question: 42**

Examine this package:

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```

CREATE OR REPLACE PACKAGE BB_PACK
IS
    V_MAX_TEAM_SALARY    NUMBER(12,2);
    PROCEDURE ADD_PLAYER(V_ID IN NUMBER, V_LAST_NAME VARCHAR2, V_SALARY NUMBER);
END BB_PACK;
/
CREATE OR REPLACE PACKAGE BODY BB_PACK
IS
    V_PLAYER_AVG    NUMBER(4,3);
    PROCEDURE UPD_PLAYER_STAT
    (V_ID IN NUMBER, V_AB IN NUMBER DEFAULT 4, V_HITS IN NUMBER)
    IS
    BEGIN
        UPDATE PLAYER_BAT_STAT
        SET AT_BATS = AT_BATS + V_AB,
            HITS = HITS + V_HITS
        WHERE PLAYER_ID = V_ID;
        COMMIT;
        VALIDATE_PLAYER_STAT(V_ID);
    END UPD_PLAYER_STAT;
    PROCEDURE ADD_PLAYER
    (V_ID IN NUMBER, V_LAST_NAME VARCHAR2, V_SALARY NUMBER)
    IS
    BEGIN
        INSERT INTO PLAYER(ID, LAST_NAME, SALARY)
        VALUES (V_ID, V_LAST_NAME, V_SALARY);
        UPD_PLAYER_STAT(V_ID, 0, 0);
    END ADD_PLAYER;
END BB_PACK;
/

```

Which statement will successfully assign .333 to the V\_PLAYER\_AVG variable from a procedure outside the package?

- A. V\_PLAYER\_AVG := .333;
- B. BB\_PACK.UPD\_PLAYER\_STAT.V\_PLAYER\_AVG := .333;
- C. BB\_PACK.V\_PLAYER\_AVG := .333;
- D. This variable cannot be assigned a value from outside of the package.

**Answer: D**

**Question: 43**

You disabled all triggers on the EMPLOYEES table to perform a data load. Now, you need to enable all triggers on the EMPLOYEES table. Which command accomplishes this?

- A. You cannot enable multiple triggers on a table in one command.
- B. ALTER TRIGGERS ON TABLE employees ENABLE;
- C. ALTER employees ENABLE ALL TRIGGERS;
- D. ALTER TABLE employees ENABLE ALL TRIGGERS;

**Answer: D**

**Question: 44**

Examine this code:

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```

CREATE OR REPLACE PROCEDURE set_bonus
(p_cutoff          IN VARCHAR2 DEFAULT 'Weekly',
 p_employee_id    IN employees.employee_id%TYPE,
 p_salary         IN employees.salary%TYPE,
 p_bonus_percent  IN OUT NUMBER DEFAULT 1.5,
 p_margin         OUT NUMBER DEFAULT 2,
 p_bonus_value    OUT NUMBER)
IS
BEGIN
    UPDATE emp_bonus
    SET bonus_amount =(p_salary * p_bonus_percent)/p_margin
    WHERE employee_id = p_employee_id;
END set_bonus;
/

```

You execute the CREATE PROCEDURE statement above and notice that it fails. What are two reasons why it fails? (Choose two.)

- A. The syntax of the UPDATE statement is incorrect.
- B. You cannot update a table using a stored procedure.
- C. The formal parameter p\_bonus\_value is declared but is not used anywhere.
- D. The declaration of the formal parameter p\_cutoff cannot have a DEFAULT clause.
- E. The declaration of the formal parameter p\_margin cannot have a DEFAULT clause.
- F. The declaration of the formal parameter p\_bonus\_percent cannot have a DEFAULT clause.

**Answer: E, F**

**Question: 45**

Which type of argument passes a value from a procedure to the calling environment?

- A. VARCHAR2
- B. BOOLEAN
- C. OUT
- D. IN

**Answer: C**

**Question: 46**

You want to create a PL/SQL block of code that calculates discounts on customer orders. This code will be invoked from several places, but only within the program unit ORDERTOTAL. What is the most appropriate location to store the code that calculates the discount?

- A. a stored procedure on the server
- B. a block of code in a PL/SQL library
- C. a standalone procedure on the client machine
- D. a block of code in the body of the program unit ORDERTOTAL
- E. a local subprogram defined within the program unit ORDERTOTAL

**Answer: E**

**Question: 47**

Which statements are true? (Choose all that apply.)

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- A. If errors occur during the compilation of a trigger, the trigger is still created.
- B. If errors occur during the compilation of a trigger you can go into SQL\*Plus and query the USER\_TRIGGERS data dictionary view to see the compilation errors.
- C. If errors occur during the compilation of a trigger you can use the SHOW ERRORS command within iSQL\*Plus to see the compilation errors.
- D. If errors occur during the compilation of a trigger you can go into SQL\*Plus and query the USER\_ERRORS data dictionary view to see compilation errors.

**Answer: A, C, D**

**Question: 48**

What is a conditional predicate in a DML trigger?

- A. A conditional predicate allows you to specify a WHEN-LOGGING-ON condition in the trigger body.
- B. A conditional predicate means you use the NEW and OLD qualifiers in the trigger body as a condition.
- C. A conditional predicate allows you to combine several DML triggering events into one in the trigger body.
- D. A conditional predicate allows you to specify a SHUTDOWN or STARTUP condition in the trigger body.

**Answer: C**

**Question: 49**

An internal LOB is \_\_\_\_\_.

- A. a table
- B. a column that is a primary key
- C. stored in the database
- D. a file stored outside of the database, with an internal pointer to it from a database column

**Answer: C**

**Question: 50**

Examine this code:

```
CREATE OR REPLACE PROCEDURE add_dept
  (p_dept_name VARCHAR2 DEFAULT 'placeholder',
   p_location  VARCHAR2 DEFAULT 'Boston')
IS
BEGIN
  INSERT INTO departments
  VALUES (dept_id_seq.NEXTVAL, p_dept_name, p_location);
END add_dept;
/
```

Which three are valid calls to the add\_dept procedure? (Choose three.)

- A. add\_dept;
- B. add\_dept('Accounting');
- C. add\_dept(, 'New York');
- D. add\_dept(p\_location=&gt; 'New York');

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**Answer: A, B, D**

**Question: 51**

You create a DML trigger. For the timing information, which are valid with a DML trigger? (Choose all that apply.)

- A. DURING
- B. IN PLACE OF
- C. ON SHUTDOWN
- D. BEFORE
- E. ON STATEMENT EXECUTION

**Answer: D**

**Question: 52**

Which two statements describe the state of a package variable after executing the package in which it is declared? (Choose two.)

- A. It persists across transactions within a session.
- B. It persists from session to session for the same user.
- C. It does not persist across transactions within a session.
- D. It persists from user to user when the package is invoked.
- E. It does not persist from session to session for the same user.

**Answer: A, E**

**Question: 53**

Examine the trigger heading:

CREATE OR REPLACE TRIGGER salary\_check BEFORE UPDATE OF sal, job ON emp FOR EACH ROW Under which condition does this trigger fire?

- A. when a row is inserted into the EMP table
- B. when the value of the SAL or JOB column in a row is updated in the EMP table
- C. when any column other than the SAL and JOB columns in a row are updated in the EMP table
- D. only when both values of the SAL and JOB columns in a row are updated together in the EMP table

**Answer: B**

**Question: 54**

Which four triggering events can cause a trigger to fire? (Choose four.)

- A. A specific error or any error occurs.
- B. A database is shut down or started up.
- C. A specific user or any user logs on or off.
- D. A user executes a CREATE or an ALTER table statement.
- E. A user executes a SELECT statement with an ORDER BY clause.
- F. A user executes a JOIN statement that uses four or more tables.

**Answer: A, B, C, D**

**Question: 55**

Which statement is valid when removing procedures?

- A. Use a drop procedure statement to drop a standalone procedure.

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- B. Use a drop procedure statement to drop a procedure that is part of a package. Then recompile the package specification.
- C. Use a drop procedure statement to drop a procedure that is part of a package. Then recompile the package body.
- D. For faster removal and re-creation, do not use a drop procedure statement. Instead, recompile the procedure using the alter procedure statement with the REUSE SETTINGS clause.

**Answer: A**

**Question: 56**

Examine this procedure:

```
CREATE OR REPLACE PROCEDURE UPD_BAT_STAT
(V_ID IN NUMBER DEFAULT 10, V_AB IN NUMBER DEFAULT 4)
IS
BEGIN
    UPDATE PLAYER_BAT_STAT
    SET AT_BATS = AT_BATS + V_AB
    WHERE PLAYER_ID = V_ID;
    COMMIT;
END;
```

Which two statements will successfully invoke this procedure in iSQL\*Plus? (Choose two.)

- A. EXECUTE UPD\_BAT\_STAT;
- B. EXECUTE UPD\_BAT\_STAT(V\_AB=>10, V\_ID=>31);
- C. EXECUTE UPD\_BAT\_STAT(31,'FOUR','TWO');
- D. UPD\_BAT\_STAT(V\_AB=>10, V\_ID=>31);
- E. RUN UPD\_BAT\_STAT;

**Answer: A, B**

**Question: 57**

Examine this code:



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```

CREATE OR REPLACE FUNCTION gen_email_name
(p_first_name VARCHAR2, p_last_name VARCHAR2, p_id NUMBER)
RETURN VARCHAR2
IS
  v_email_name VARCHAR2(19);
BEGIN
  v_email_name := SUBSTR(p_first_name, 1, 1) ||
                 SUBSTR(p_last_name, 1, 7) ||
                 '@Oracle.com';
  UPDATE employees
  SET   email = v_email_name
  WHERE employee_id = p_id;
  RETURN v_email_name;
END;

```

You run this SELECT statement:

```

SELECT first_name, last_name,
       gen_email_name(first_name, last_name, 108) EMAIL
FROM employees;

```

What occurs?

- A. Employee 108 has his email name updated based on the return result of the function.
- B. The statement fails because functions called from SQL expressions cannot perform DML.
- C. The statement fails because the function does not contain code to end the transaction.
- D. The SQL statement executes successfully, because UPDATE and DELETE statements are ignored in stored functions called from SQL expressions.
- E. The SQL statement executes successfully and control is passed to the calling environment.

**Answer: B**

**Question: 58**

Which three statements are true regarding database triggers? (Choose three.)

- A. A database trigger is a PL/SQL block, C, or Java procedure associated with a table, view, schema, or the database.
- B. A database trigger needs to be executed explicitly whenever a particular event takes place.
- C. A database trigger executes implicitly whenever a particular event takes place.
- D. A database trigger fires whenever a data event (such as DML) or system event (such as logon, shutdown) occurs on a schema or database.
- E. With a schema, triggers fire for each event for all users; with a database, triggers fire for each event for that specific user.

**Answer: A, C, D**

**Question: 59**

Examine this function:

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```

CREATE OR REPLACE FUNCTION CALC_PLAYER_AVG
  (V_ID in PLAYER_BAT_STAT.PLAYER_ID%TYPE)
  RETURN NUMBER
IS
  V_AVG NUMBER;
BEGIN
  SELECT HITS / AT_BATS
  INTO V_AVG
  FROM PLAYER_BAT_STAT
  WHERE PLAYER_ID = V_ID;
  RETURN (V_AVG);
END;

```

Which statement will successfully invoke this function in SQL\*Plus?

- A. SELECT CALC\_PLAYER\_AVG(PLAYER\_ID) FROM PLAYER\_BAT\_STAT;
- B. EXECUTE CALC\_PLAYER\_AVG(31);
- C. CALC\_PLAYER('Ruth');
- D. CALC\_PLAYER\_AVG(31);
- E. START CALC\_PLAYER\_AVG(31)

**Answer: A**

**Question: 60**

A dependent procedure or a function directly or indirectly references one or more of which four objects? (Choose four.)

- A. view
- B. sequence
- C. privilege
- D. procedure
- E. anonymous block
- F. packaged procedure or function

**Answer: A, B, D, F**

**Question: 61**

Which command must you issue to allow users to access the UPD\_TEAM\_STAT trigger on the TEAM table?

- A. GRANT SELECT,INSERT,UPDATE,DELETE ON TEAM TO PUBLIC;
- B. GRANT SELECT,INSERT,UPDATE,DELETE ON UPD\_TEAM\_STAT TO PUBLIC;
- C. GRANT EXECUTE ON TEAM TO PUBLIC
- D. GRANT SELECT, EXECUTE ON TEAM, UPD\_TEAM\_STAT TO PUBLIC;

**Answer: A**

**Question: 62**

Examine this code:

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```

CREATE OR REPLACE PROCEDURE audit_emp
  (p_id IN emp.empno%TYPE)
IS
  v_id NUMBER;
  PROCEDURE log_exec
  IS
  BEGIN
    INSERT INTO log_table (user_id, log_date)
      VALUES (USER, SYSDATE);
  END log_exec;
  v_name VARCHAR2 (20);
BEGIN
  DELETE FROM emp
    WHERE empno = p_id;
  log_exec;
  SELECT ename, empno
    INTO v_name, v_id
  FROM emp
    WHERE empno = p_id;
END audit_emp;

```

Why does this code cause an error when compiled?

- A. An insert statement is not allowed in a subprogram declaration.
- B. Procedure LOG\_EXEC should be declared before any identifiers.
- C. Variable v\_name should be declared before declaring the LOG\_EXEC procedure.
- D. The LOG\_EXEC procedure should be invoked as EXECUTE log\_exec within the AUDIT\_EMP procedure.

**Answer: C**

**Question: 63**

Which three are true regarding error propagation? (Choose three.)

- A. An exception cannot propagate across remote procedure calls.
- B. An exception raised inside a declaration immediately propagates to the current block.
- C. The use of the RAISE; statement in an exception handler reraises the current exception.
- D. An exception raised inside an exception handler immediately propagates to the enclosing block.

**Answer: A, C, D**

**Question: 64**

You need to implement a virtual private database (vpd). In order to have the vpd functionality, a trigger is required to fire when every user initiates a session in the database. What type of trigger needs to be created?

- A. DML trigger
- B. System event trigger
- C. INSTEAD OF trigger
- D. Application trigger

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**Answer: B**

**Question: 65**

The add\_player procedure inserts rows into the PLAYER table. Which command will show this direct dependency?

- A. SELECT \* FROM USER\_DEPENDENCIES WHERE REFERENCED\_NAME = 'PLAYER';
- B. SELECT \* FROM USER\_DEPENDENCIES WHERE REFERENCED\_NAME = 'ADD\_PLAYER';
- C. SELECT \* FROM USER\_DEPENDENCIES WHERE TYPE = 'DIR';
- D. SELECT \* FROM USER\_DEPENDENCIES WHERE REFERENCED\_NAME = 'TABLE';

**Answer: A**

**Question: 66**

Which code successfully calculates tax?

- A. CREATE OR REPLACE PROCEDURE calctax (p\_no IN NUMBER) RETURN tax IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- B. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) RETURN NUMBER IS v\_sal NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; RETURN (v\_sal \* 0.05); END;
- C. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) RETURN NUMBER IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- D. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- E. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- F. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- G. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- H. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- I. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); tax := v\_sal \* 0.05; END;
- J. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); END;
- K. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); END;
- L. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); END;
- M. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \*

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0.05; RETURN (tax); END; v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); END;

**Answer: B**

**Question: 67**

Examine this code:

```
CREATE OR REPLACE FUNCTION change_dept
(p_old_id NUMBER, p_deptname VARCHAR2)
RETURN NUMBER
IS
    v_new_id NUMBER;
BEGIN
    SELECT departments_seq.nextval
    INTO    v_new_id
    FROM    dual;
    UPDATE departments
    SET     department_id    = v_new_id,
           department_name = p_deptname
    WHERE  department_id    = p_old_id;
    RETURN v_new_id;
END;
/
```

There are no foreign key integrity constraints on the EMPLOYEES and DEPARTMENTS tables. Which statement performs a successful update to the EMPLOYEES table?

- A. UPDATE departments SET department\_id = change\_dept(10, 'Finance') WHERE department\_id = 10;
- B. UPDATE employees SET department\_id = change\_dept(10, 'Finance') WHERE department\_id = 10;
- C. UPDATE departments SET department\_id = change\_dept(270, 'OUTSOURCE') WHERE department\_name = 'Payroll';
- D. UPDATE employees, change\_dept(270, 'Outsource') SET department\_id = DEPARTMENTS.CURRVAL;

**Answer: B**

**Question: 68**

Which two statements about object dependencies are accurate? (Choose two.)

- A. When referencing a package procedure or function from a stand-alone procedure or function, if the package specification changes, the package body remains valid but the stand-alone procedure becomes invalid.
- B. When referencing a package procedure or function from a stand-alone procedure or function, if the package body changes and the package specification does not change, the stand-alone procedure referencing a package construct remains valid.
- C. When referencing a package procedure or function from a stand-alone procedure or function, if the package body changes and the package specification does not change, the stand-alone procedure referencing a package construct becomes invalid.

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D. When referencing a package procedure or function from a stand-alone procedure or function, if the package specification changes, the stand-alone procedure referencing a package construct as well as the package body become invalid.

**Answer: B, D**

**Question: 69**

Which code successfully calculates tax?

- A. CREATE OR REPLACE PROCEDURE calctax (p\_no IN NUMBER) RETURN tax IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- B. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) RETURN NUMBER IS v\_sal NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; RETURN (v\_sal \* 0.05); END;
- C. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) RETURN NUMBER IS v\_sal NUMBER; tax NUMBER; BEGIN SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; END;
- D. CREATE OR REPLACE FUNCTION calctax (p\_no NUMBER) IS v\_sal NUMBER; tax NUMBER; BEGIN tax NUMBER; BEGIN SELECT sal INTO v\_sal BEGIN SELECT sal INTO v\_sal FROM emp SELECT sal INTO v\_sal FROM emp WHERE empno = p\_no; FROM emp WHERE empno = p\_no; tax := v\_sal \* 0.05; WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); WHERE empno = p\_no; tax := v\_sal \* 0.05; RETURN (tax); END; tax := v\_sal \* 0.05; RETURN (tax); END; RETURN (tax); END;

**Answer: B**

**Question: 70**

A CALL statement inside the trigger body enables you to call \_\_\_\_\_.

- A. a package
- B. a stored function
- C. a stored procedure
- D. another database trigger

**Answer: C**

**Question: 71**

Examine this package:

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```
CREATE OR REPLACE PACKAGE manage_emp
IS
    tax_rate CONSTANT NUMBER(5,2) := .28;
    v_id NUMBER;
    PROCEDURE insert_emp (p_deptno NUMBER, p_sal NUMBER);
    PROCEDURE delete_emp;
    PROCEDURE update_emp;
    FUNCTION calc_tax (p_sal NUMBER)
        RETURN NUMBER;
END manage_emp;
/
CREATE OR REPLACE PACKAGE BODY manage_emp
IS
    PROCEDURE update_sal
        (p_raise_amt NUMBER)
    IS
    BEGIN
        UPDATE emp
            SET sal = (sal * p_raise_amt) + sal
            WHERE empno = v_id;
    END;
    PROCEDURE insert_emp
        (p_deptno NUMBER, p_sal NUMBER)
    IS
    BEGIN
        INSERT INTO emp(empno, deptno, sal)
            VALUES(v_id, p_deptno, p_sal);
    END insert_emp;
    PROCEDURE delete_emp
    IS
    BEGIN
        DELETE FROM emp
            WHERE empno = v_id;
    END delete_emp;
    PROCEDURE update_emp
```

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```

IS
  v_sal NUMBER(10, 2);
  v_raise NUMBER(10, 2);
BEGIN
  SELECT sal
    INTO v_sal
   FROM emp
   WHERE empno = v_id;
  IF v_sal < 500 THEN
    v_raise := .05;
  ELSIF v_sal < 1000 THEN
    v_raise := .07;
  ELSE
    v_raise := .04;
  END IF;
  update_sal(v_raise);
END update_emp;
FUNCTION calc_tax
(p_sal NUMBER)
RETURN NUMBER
IS
BEGIN
  RETURN p_sal * tax_rate;
END calc_tax;
END manage_emps;
/

```

What is the name of the private procedure in this package?

- A. CALC\_TAX
- B. INSERT\_EMP
- C. UPDATE\_SAL
- D. DELETE\_EMP
- E. UPDATE\_EMP
- F. MANAGE\_EMPS

**Answer: C**

**Question: 72**

You have a row level BEFORE UPDATE trigger on the EMP table. This trigger contains a SELECT statement on the EMP table to ensure that the new salary value falls within the minimum and maximum salary for a given job title. What happens when you try to update a salary value in the EMP table?

- A. The trigger fires successfully.
- B. The trigger fails because it needs to be a row level AFTER UPDATE trigger.
- C. The trigger fails because a SELECT statement on the table being updated is not allowed.
- D. The trigger fails because you cannot use the minimum and maximum functions in a BEFORE UPDATE trigger.

**Answer: C**



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**Question: 73**

Consider this scenario:

A procedure X references a view Y that is based on a table Z. Which two statements are true? (Choose two.)

- A. Y is a referenced object.
- B. Z is a direct dependent of X.
- C. Y is a direct dependent of X.
- D. Y is an indirect dependent of X.
- E. Y is an indirect dependent of Z.
- F. Z is an indirect dependent of Y.

**Answer: A, C**

**Question: 74**

Which statement is true about removing packages?

- A. You must remove the package body first.
- B. Removing a package specification removes the body too.
- C. Removing the package body removes the specification too.
- D. You must remove both the package body and the specification separately.
- E. Removing a package specification removes all stand alone stored functions named in the specification.

**Answer: B**

**Question: 75**

Which two does the INSTEAD OF clause in a trigger identify? (Choose two.)

- A. The view associated with the trigger.
- B. The table associated with the trigger.
- C. The event associated with the trigger.
- D. The package associated with the trigger.
- E. The statement level or for each row association to the trigger.

**Answer: A, C**

**Question: 76**

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

- A. BFILES are stored in the database.
- B. All LOBs have read and write access.
- C. NCLOB represents a multi-byte character object.
- D. The Oracle9i server performs implicit conversions between BLOBs and NUMBER data types.
- E. The Oracle9i server performs implicit conversions between CLOBs and VARCHAR2 data types.

**Answer: C, E**

**Question: 77**

Which statement is true?

- A. Stored functions can be called from the SELECT and WHERE clauses only.
- B. Stored functions do not permit calculations that involve database links in a distributed environment.

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- C. Stored functions cannot manipulate new types of data, such as longitude and latitude.
- D. Stored functions can increase the efficiency of queries by performing functions in the query rather than in the application.

**Answer: D**

**Question: 78**

Examine this code:

```
CREATE OR REPLACE PROCEDURE add_dept
  (p_name departments.department_name%TYPE DEFAULT 'unknown',
   p_loc  departments.location_id%TYPE DEFAULT 1700)
IS
BEGIN
  INSERT INTO departments(department_id, department_name,
    location_id)
  VALUES(dept_seq.NEXTVAL,p_name, p_loc);
END add_dept;
/
```

You created the add\_dept procedure above, and you now invoke the procedure in SQL\*Plus. Which four are valid invocations? (Choose four.)

- A. EXECUTE add\_dept(p\_loc=>2500)
- B. EXECUTE add\_dept('Education', 2500)
- C. EXECUTE add\_dept('2500', p\_loc =>2500)
- D. EXECUTE add\_dept(p\_name=>'Education', 2500)
- E. EXECUTE add\_dept(p\_loc=>2500, p\_name=>'Education')

**Answer: A, B, C, E**

**Question: 79**

Examine this package:

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```

CREATE OR REPLACE PACKAGE pack_cur
IS
  CURSOR c1 IS
    SELECT  prodid
      FROM  product
      ORDER BY prodid DESC;
  PROCEDURE proc1;
  PROCEDURE proc2;
END pack_cur;
/

CREATE OR REPLACE PACKAGE BODY pack_cur
IS
  v_prodid NUMBER;
  PROCEDURE proc1 IS
  BEGIN
    OPEN c1;
    LOOP
      FETCH c1 INTO v_prodid;
      DBMS_OUTPUT.PUT_LINE('Row is: ' || c1%ROWCOUNT);
      EXIT WHEN c1%ROWCOUNT >= 3;
    END LOOP;
  END proc1;
  PROCEDURE proc2 IS
  BEGIN
    LOOP
      FETCH c1 INTO v_prodid;
      DBMS_OUTPUT.PUT_LINE('Row is: ' || c1%ROWCOUNT);
      EXIT WHEN c1%ROWCOUNT >= 6;
    END LOOP;
    CLOSE c1;
  END proc2;
END pack_cur;
/

```

The product table has more than 1000 rows. The SQL\*Plus SERVEROUTPUT setting is turned on in your session.

You execute the procedure PROC1 from SQL\*Plus with the command:

```
EXECUTE pack_cur.proc1
```

What is the output in your session?

- A. ERROR at line 1:
- B. Row is Row is: Row is:
- C. Row is: 1 Row is: 2 Row is: 3
- D. Row is: 4 Row is: 5 Row is: 6

**Answer: C**

**Question: 80**

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

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- A. A function must have a return statement in its body to execute successfully.
- B. Client-side functions can be used in SQL statements.
- C. A stored function that is called from a SQL statement can return a value of any PL/SQL variable data type.
- D. From SQL\*Plus, a function can be executed by giving the command EXECUTE functionname;.
- E. A stored function increases efficiency of queries by performing functions on the server rather than in the application.

**Answer: A, E**

**Question: 81**

Examine this package:

```

CREATE OR REPLACE PACKAGE BB_PACK
IS
    V_MAX_TEAM_SALARY    NUMBER(12,2);
    PROCEDURE ADD_PLAYER(V_ID IN NUMBER, V_LAST_NAME VARCHAR2, V_SALARY NUMBER);
END BB_PACK;
/
CREATE OR REPLACE PACKAGE BODY BB_PACK
IS
    V_PLAYER_AVG    NUMBER(4,3);
    PROCEDURE UPD_PLAYER_STAT
    (V_ID IN NUMBER, V_AB IN NUMBER DEFAULT 4, V_HITS IN NUMBER)
    IS
    BEGIN
        UPDATE PLAYER_BAT_STAT
        SET AT_BATS = AT_BATS + V_AB,
            HITS = HITS + V_HITS
        WHERE PLAYER_ID = V_ID;
        COMMIT;
        VALIDATE_PLAYER_STAT(V_ID);
    END UPD_PLAYER_STAT;
    PROCEDURE ADD_PLAYER
    (V_ID IN NUMBER, V_LAST_NAME VARCHAR2, V_SALARY NUMBER)
    IS
    BEGIN
        INSERT INTO PLAYER(ID, LAST_NAME, SALARY)
        VALUES (V_ID, V_LAST_NAME, V_SALARY);
        UPD_PLAYER_STAT(V_ID, 0, 0);
    END ADD_PLAYER;
END BB_PACK;

```

If you add an IF statement to the ADD\_PLAYER procedure, which additional step must you perform?

- A. Recompile the ADD\_PLAYER procedure.
- B. Recompile both the BB\_PACK specification and body.
- C. Recompile the BB\_PACK specification.
- D. Recompile the BB\_PACK body.

**Answer: D**

**Question: 82**

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Which code can you use to ensure that the salary is not increased by more than 10% at a time nor is it ever decreased?

- A. ALTER TABLE emp ADD CONSTRAINT ck\_sal CHECK (sal BETWEEN sal AND sal\*1.1);
- B. CREATE OR REPLACE TRIGGER check\_sal BEFORE UPDATE OF sal ON emp FOR EACH ROW WHEN (new.sal < old.sal OR new.sal > old.sal \* 1.1) BEGIN RAISE\_APPLICATION\_ERROR (- 20508, 'Do not decrease salary nor increase by more than 10%'); END;
- C. CREATE OR REPLACE TRIGGER check\_sal BEFORE UPDATE OF sal ON emp WHEN (new.sal < old.sal OR new.sal > old.sal \* 1.1) BEGIN RAISE\_APPLICATION\_ERROR (- 20508, 'Do not decrease salary nor increase by more than 10%'); END;
- D. CREATE OR REPLACE TRIGGER check\_sal AFTER UPDATE OF sal ON emp WHEN (new.sal < old.sal OR -new.sal > old.sal \* 1.1) BEGIN RAISE\_APPLICATION\_ERROR (- 20508, 'Do not decrease salary nor increase by more than 10%'); END;

**Answer: B**

**Question: 83**

How can you migrate from a LONG to a LOB data type for a column?

- A. Use the DBMS\_MANAGE\_LOB.MIGRATE procedure.
- B. Use the UTL\_MANAGE\_LOB.MIGRATE procedure.
- C. Use the DBMS\_LOB.MIGRATE procedure.
- D. Use the ALTER TABLE command.
- E. You cannot migrate from a LONG to a LOB data type for a column.

**Answer: D**

**Question: 84**

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

- A. Both the specification and body are required components of a package.
- B. The package specification is optional, but the package body is required.
- C. The package specification is required, but the package body is optional.
- D. The specification and body of the package are stored together in the database.
- E. The specification and body of the package are stored separately in the database.

**Answer: C, E**

**Question: 85**

When using a PL/SQL stored package, how is a side effect defined?

- A. changes only to database tables
- B. changes only to packaged public variables defined in a package body
- C. changes only to packaged public variables defined in a package specification
- D. changes to database tables or packaged public variables defined in a package body
- E. changes to database tables or packaged variables defined in a package specification

**Answer: E**

**Question: 86**

Examine this code:

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```

CREATE OR REPLACE PROCEDURE load_bfile
  (p_file_loc IN VARCHAR2)
IS
  v_file      BFILE;
  v_filename  VARCHAR2(16);
  CURSOR emp_cursor IS
    SELECT employee_id
    FROM   employees
    WHERE  job_id = 'IT_PROG'
    FOR    UPDATE;
BEGIN
  FOR emp_record IN emp_cursor LOOP
    v_filename := emp_record.employee_id || '.GIF';
    v_file := BFILENAME(p_file_loc, v_filename);
  END LOOP;
END;
/

```

What does the BFILENAME function do?

- A. It reads data from an external BFILE.
- B. It checks for the existence of an external BFILE.
- C. It returns a BFILE locator that is associated with a physical LOB binary file on the server's file system.
- D. It creates a directory object for use with the external BFILES.

**Answer: C**

**Question: 87**

Which two describe a stored procedure? (Choose two.)

- A. A stored procedure is typically written in SQL.
- B. A stored procedure is a named PL/SQL block that can accept parameters.
- C. A stored procedure is a type of PL/SQL subprogram that performs an action.
- D. A stored procedure has three parts: the specification, the body, and the exception handler part.
- E. The executable section of a stored procedure contains statements that assign values, control execution, and return values to the calling environment.

**Answer: B, C**

**Question: 88**

You need to create a trigger to ensure that information in the EMP table is only modified during business hours, Monday to Friday from 9:00am to 5:00pm. Which types of trigger do you create? (Choose two.)

- A. row level AFTER INSERT OR UPDATE OR DELETE ON EMP
- B. row level BEFORE INSERT OR UPDATE OR DELETE ON EMP
- C. statement level AFTER INSERT OR UPDATE OR DELETE ON EMP
- D. statement level BEFORE INSERT OR UPDATE OR DELETE ON EMP

**Answer: B, D**

**Question: 89**

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Examine this package:

```

CREATE OR REPLACE PACKAGE discounts
IS
  g_id NUMBER := 7839;
  discount_rate NUMBER := 0.00;
  PROCEDURE display_price (p_price NUMBER);
END discounts;
/
CREATE OR REPLACE PACKAGE BODY discounts
IS
  PROCEDURE display_price (p_price NUMBER)
  IS
  BEGIN
    DBMS_OUTPUT.PUT_LINE('Discounted '||
      TO_CHAR(p_price*NVL(discount_rate, 1)));
  END display_price;
  BEGIN
    discount_rate := 0.10;
  END discounts;
/

```

The SQL\*Plus SERVEROUTPUT setting is turned on in your session. You execute the procedure DISPLAY\_PRICE from SQL\*Plus with the command: EXECUTE discounts.display\_price (100); What is the result?

- A. Discounted 10
- B. Discounted 100
- C. Discounted 0.00
- D. Discounted NULL
- E. Discounted 0.10

**Answer: A**

**Question: 90**

You want to create procedures, functions and packages. Which privilege do you need?

- A. EXECUTE CODE object privilege
- B. CREATE ANY CODE object privilege
- C. CREATE PACKAGE system privilege
- D. CREATE PROCEDURE system privilege
- E. CREATE FUNCTION, CREATE PROCEDURE, CREATE PACKAGE system privileges

**Answer: D**

**Question: 91**

The creation of which four database objects will cause a DDL trigger to fire? (Choose four.)

- A. index
- B. cluster
- C. package
- D. function

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- E. synonyms
- F. dimensions
- G. database links

**Answer: A, B, C, D**

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