```
PLSQL feedback final exam semister 1
```

Test: Final Exam Semester 1

Review your answers, feedback, and question scores below. An asterisk (\*) indicates a correct answer.

Section 6

1. The following code does not violate any constraints and will not raise an ORA-02292 error. What will happen when the code is executed? BEGIN

**DECLARE** 

e\_constraint\_violation EXCEPTION;

PRAGMA EXCEPTION\_INIT(e\_constraint\_violation, -2292);

REGTN

DBMS\_OUTPUT.PUT\_LINE('Inner block message');

END;

**EXCEPTION** 

WHEN e\_constraint\_violation THEN

DBMS\_OUTPUT.PUT\_LINE('Outer block message');

END;

Mark for Review

(1) Points

Inner block message' will be displayed.

The code will fail because the exception is declared in the inner block but is referenced in the outer block. (\*)

Outer block message' will be displayed.

The code will fail because line 4 should read: PRAGMA EXCEPTION\_INIT(-2292, e\_constraint\_violation);

Incorrect. Refer to Section 6.

2. Using two nested blocks, a TOO\_MANY\_ROWS exception is raised within the inner block. Which of the following exception handlers will successfully handle the exception? Mark for Review (1) Points

WHEN TOO\_MANY\_ROWS in the inner block

WHEN TOO\_MANY\_ROWS in either block

WHEN OTHERS in either block

WHEN OTHERS in the inner block

All of the above (\*)

Incorrect. Refer to Section 6.

3. What will be displayed when the following code is executed? <<outer>> DECLARE

v\_myvar NUMBER;

```
PLSQL feedback final exam semister 1
BEGIN
    v_myvar := 10;
    DECLARE
       v_myvar NUMBER := 200;
    BEGIN
       outer.v_myvar := 20;
       v_myvar := v_myvar / 0; -- this raises a ZERO_DIVIDE error
       outer.v_myvar := 30;
    END;
    v_myvar := 40;
EXCEPTION
    WHEN ZERO_DIVIDE THEN
       DBMS_OUTPUT.PUT_LINE(v_myvar);
END;
Mark for Review
(1) Points
    10
    20 (*)
    30
    40
    200
      Incorrect. Refer to Section 6.
  4. Using nested blocks, when is it necessary to label the outer block?. Mark for
Review
(1) Points
    You must always label the outer block.
   You must always label both blocks.
    You must label the outer block when two variables with the same name are
declared, one in each block.
    You must label the outer block when two variables with the same name are
declared and you need to reference the outer block's variable within the inner
block. (*)
    Block labels are just comments and are therefore recommended but never needed.
      Correct
     There are no employees in department 75. What will be displayed when this code
is executed?
DECLARE
    v_last_name employees.last_name%TYPE;
BEGIN
    DBMS_OUTPUT.PUT_LINE('A');
    BEGIN
       SELECT last_name INTO v_last_name
          FROM employees WHERE department_id = 75;
       DBMS_OUTPUT.PUT_LINE('B');
```

Page 2

```
PLSQL feedback final exam semister 1
    DBMS_OUTPUT.PUT_LINE('C');
EXCEPTION
   WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE('D');
END;
Mark for Review
(1) Points
C
D
(*)
    Α
    Α
В
    None of the above
      Incorrect. Refer to Section 6.
  6. What will happen when the following code is executed?
BEGIN -- outer block
   DECLARE -- inner block
       CURSOR emp_curs IS SELECT * FROM employees;
       v_emp_rec emp_curs%ROWTYPE;
    BEGIN
       OPEN emp_curs;
          FETCH emp_curs INTO v_emp_rec:
          DBMS_OUTPUT.PUT_LINE(v_emp_rec.salary);
       END LOOP;
    END;
    CLOSE emp_curs;
END;
Mark for Review
(1) Points
    The code will fail because you cannot declare a cursor in an inner block.
    The code will fail because the cursor is declared in the inner block but is
referenced in the outer block. (*)
    The code will execute successfully and display all the employees' salaries.
    The code will execute forever because there is no statement to EXIT from the
loop.
```

Correct

7. Which of the following best describes a user-defined exception? Mark for Review

(1) Points

A predefined Oracle Server error such as NO\_DATA\_FOUND

A non-predefined Oracle Server error such as ORA-01400

An error which is not automatically raised by the Oracle server (\*)

Any error which has an Oracle error number of the form ORA-nnnnn

Correct

8. Which of the following are examples of predefined Oracle Server errors? (Choose three.) Mark for Review

(1) Points

(Choose all correct answers)

TOO\_MANY\_ROWS (\*)

NO\_DATA\_FOUND (\*)

**OTHERS** 

ZERO\_DIVIDE (\*)

E\_INSERT\_EXCEP

Incorrect. Refer to Section 6.

9. An attempt to insert a null value into a NOT NULL table column raises an ORA-01400 exception. How can you code an exception handler to trap this exception? Mark for Review

(1) Points

Test for WHEN ORA-1400 in the exception section.

Declare a variable e\_null\_excep of type EXCEPTION, associate it with ORA-01400 using a PRAGMA directive, and test for WHEN e\_null\_excep in the exception section. (\*)

Declare a variable e\_null\_excep of type VARCHAR2, associate it with ORA-01400 using a PRAGMA directive, and test for WHEN e\_null\_excep in the exception section.

Declare a variable as follows: e\_null\_excep EXCEPTION := -01400; Then test for WHEN e\_null\_excep in the exception section.

Correct

10. Which kinds of exceptions are raised implicitly (i.e., automatically)? (Choose two.) Mark for Review

```
PLSQL feedback final exam semister 1
(1) Points
   (Choose all correct answers)
    Predefined Oracle Server errors such as NO_DATA_FOUND (*)
    User-defined errors
    All errors
    Non-predefined Oracle Server errors such as ORA-01400 (*)
      Correct
Page 1 of 5
Test: Final Exam Semester 1
Review your answers, feedback, and question scores below. An asterisk (*) indicates
a correct answer.
 Section 6
  11. How can you retrieve the error code and error message of any Oracle Server
exception? Mark for Review
(1) Points
    By using the functions SQLCODE and SQLERRM (*)
    By using the functions SQLCODE and SQLERR
    By using RAISE_APPLICATION_ERROR
    By defining an EXCEPTION variable and using PRAGMA EXCEPTION_INIT
      Incorrect. Refer to Section 6.
  12. Examine the following code. What message or messages will be displayed when
this code is executed?
DECLARE
    v_last_name employees.last_name%TYPE;
    v_number NUMBER := 27;
    v_number := v_number / 0;
SELECT last_name INTO v_last_name FROM employees
    WHERE employee_id = 999;
EXCEPTION
    WHEN NO_DATA_FOUND THEN
       DBMS_OUTPUT.PUT_LINE('No rows were found');
    WHEN ZERO_DIVIDE THEN
       DBMS_OUTPUT.PUT_LINE('Attempt to divide by zero');
                                         Page 5
```

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('An error occurred');

END;

Mark for Review (1) Points

No rows were found

Attempt to divide by zero (\*)

Attempt to divide by zero No rows were found

An error occurred

No message will be displayed

Incorrect. Refer to Section 6.

13. Which of the following is NOT an advantage of including an exception handler in a PL/SQL block? Mark for Review (1) Points

Protects the database from errors

Code is more readable because error-handling routines can be written in the same block in which the error occurred

Prevents errors from occurring (\*)

Avoids costly and time-consuming correction of mistakes

Correct

14. Which of the following are good practice guidelines for exception handling? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

Test your code with different combinations of data to see what potential errors can happen. (\*)

Use an exception handler whenever there is any possibility of an error occurring. (\*)

Include a WHEN OTHERS handler as the first handler in the exception section.

Allow exceptions to propagate back to the calling environment.

Handle specific named exceptions where possible, instead of relying on WHEN OTHERS. (\*)

Incorrect. Refer to Section 6.

15. Which of the following best describes a PL/SQL exception? Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
```

A user enters an invalid password while trying to log on to the database.

An error occurs during execution which disrupts the normal operation of the program. (\*)

A DML statement does not modify any rows.

The programmer makes a spelling mistake while writiing the PL/SQL code.

Incorrect. Refer to Section 6.

Which of the following EXCEPTION sections are constructed correctly? (Choose two.) Mark for Review (1) Points (Choose all correct answers) **EXCEPTION** WHEN NO\_DATA\_FOUND THEN statement\_1; WHEN OTHERS THEN statement\_2; END; (\*) **EXCEPTION** WHEN OTHERS THEN statement\_2; WHEN NO\_DATA\_FOUND THEN statement\_1; END; **EXCEPTION** WHEN NO\_DATA\_FOUND THEN statement\_1; WHEN NO\_DATA\_FOUND THEN statement\_2; WHEN OTHERS THEN statement\_3; END; **EXCEPTION** WHEN OTHERS THEN statement\_1; END; (\*)

Incorrect. Refer to Section 6.

17. User-defined exceptions must be declared explicitly by the programmer, but then are raised automatically by the Oracle Server. True or False? Mark for Review (1) Points

True

False (\*)

Incorrect. Refer to Section 6.

18. There are no employees in department\_id 99. What output will be displayed Page 7

```
PLSQL feedback final exam semister 1
when the following code is executed?
DECLARE
    v_count NUMBER;
BEGIN
    SELECT COUNT(*) INTO v_count
       FROM employees WHERE department_id = 99;
    IF v_count = 0 THEN
       RAISE NO_DATA_FOUND;
       DBMS_OUTPUT.PUT_LINE('No employees found');
    END IF;
EXCEPTION
    WHEN NO_DATA_FOUND THEN
       DBMS_OUTPUT.PUT_LINE('Department 99 is empty');
END;
Mark for Review
(1) Points
    No employees found
    No employees found Department 99 is empty
    Department 99 is empty (*)
    The block will fail because you cannot explicitly RAISE a predefined Oracle
Server error such as NO_DATA_FOUND
      Correct
  19. Department-id 99 does not exist. What will be displayed when the following
code is executed?
DECLARE
    v_deptname departments.department_name%TYPE;
BEGIN
    SELECT department_name INTO v_deptname
       FROM departments WHERE department_id = 99;
EXCEPTION
    WHEN NO_DATA_FOUND THEN
       RAISE_APPLICATION_ERROR(-20201, 'Department does not exist');
END:
Mark for Review
(1) Points
    ORA-01403: No Data Found ORA-20201: Department does not exist
   ORA-01403: No Data Found
    ORA-20201: Department does not exist (*)
    None of the above
      Incorrect. Refer to Section 6.
      A user-defined exception can be raised:
A. In the declaration section
B. In the executable section
C. In the exception section
Mark for Review
(1) Points
```

```
PLSQL feedback final exam semister 1
    В
    C
    A and B
    B and C (*)
    A and C
      Incorrect. Refer to Section 6.
 Page 2 of 5
Test: Final Exam Semester 1
Review your answers, feedback, and question scores below. An asterisk (*) indicates
a correct answer.
 Section 7
  21. What are the type of parameter modes? Mark for Review
(1) Points
    CHARACTER, NUMBER, DATE, BOOLEAN
    CONSTANT, VARIABLE, DEFAULT
    LOCAL, GLOBAL, BOTH
    IN, OUT, IN OUT (*)
      Incorrect. Refer to Section 7.
22. Which parameter mode is the default? Mark for Review (1) Points
    IN (*)
    OUT
    NUMBER
    VARIABLE
    CONSTANT
      Incorrect. Refer to Section 7.
```

23. Procedure SOMEPROC has five parameters named A, B, C, D, E in that order. The procedure was called as follows: SOMEPROC(10,20,D=>50);

How was parameter D referenced?
Mark for Review
(1) Points

Positionally

Named (\*)

A combination of positionally and named

A combination of named and defaulted

Defaulted

Incorrect. Refer to Section 7.

24. Procedure SOMEPROC has five parameters named A, B, C, D, E in that order. The procedure was called as follows: SOMEPROC(10,20,D=>50);

How was parameter B referenced?
Mark for Review
(1) Points

Positional (\*)

Named

A combination of positionally and named

A combination of named and defaulted

Defaulted

Correct

25. Which of the following can NOT be used as the datatype of a procedure parameter? Mark for Review (1) Points

A non-SQL datatype such as BOOLEAN

The name of another procedure (\*)

A large object datatype such as CLOB

A PLSQL record defined using %ROWTYPE

Incorrect. Refer to Section 7.

26. Examine the following procedure: CREATE OR REPLACE PROCEDURE smallproc

```
PLSQL feedback final exam semister 1
(p_param IN NUMBER)
TS
BEGIN ....
The procedure is invoked by:
DECLARE
v_param NUMBER := 20;
BEGIN
smallproc(v_param);
Which of the following statements is true? Mark for Review
(1) Points
    p_param is a parameter and v_param is an argument
    p_param is a formal parameter and 20 is an actual parameter
    p_param is a formal parameter and v_param is an actual parameter (*)
    p_param and v_param are both formal parameters, while 20 is an actual parameter
    p_param is an actual parameter and v_param is a formal parameter
      Correct
      You want to create a procedure named SOMEPROC which accepts a single
parameter named SOMEPARM. The parameter can be up to 100 characters long. Which of
the following is correct syntax to do this? Mark for Review
(1) Points
    CREATE PROCEDURE someproc
    (someparm varchar2)
IS
BEGIN ...
(*)
    CREATE PROCEDURE someproc
    (someparm varchar2(100))
BEGIN...
    CREATE PROCEDURE someproc
IS
    (someparm VARCHAR2)
BEGIN...
    CREATE PROCEDURE someproc
    someparm varchar2(100);
IS
    BEGIN...
    CREATE PROCEDURE someproc
    (someparm 100)
BEGIN ...
```

Incorrect. Refer to Section 7.

```
28. Which of the following is NOT correct coding for a procedure parameter? Mark
for Review (1) Points
    (p_param IN VARCHAR2)
    (p_param VARCHAR2)
    (p_param VARCHAR2(50)) (*)
    (p_param employees.last_name%TYPE)
    (p_param IN OUT VARCHAR2)
      Incorrect. Refer to Section 7.
  29. Which of the following statements about actual parameters is NOT true? Mark
for Review (1) Points
    An actual parameter is declared in the calling environment, not in the called
procedure
    An actual parameter must be the name of a variable (*)
    An actual parameter can have a Boolean datatype
    The datatypes of an actual parameter and its formal parameter must be compatible
    An actual parameter can have a TIMESTAMP datatype
      Incorrect. Refer to Section 7.
      You have created the following procedure:
CREATE OR REPLACE PROCEDURE double_it
(p_param IN OUT NUMBER)
BEGIN
p_param := p_param * 2;
Which of the following anonymous blocks invokes this procedure successfully? Mark
for Review (1) Points
    BEGIN
EXECUTE double_it(20);
END;
    BEGIN
SELECT double_it(20)
FROM DUAL;
END;
    DECLARE
v_result NUMBER(6);
BEGIN
```

```
PLSQL feedback final exam semister 1
v_result := double_it(20);
END;
    DECLARE
v_result NUMBER(6) := 20;
BEGIN
double_it(v_result);
END; (*)
    BEGIN
double_it(20);
END;
      Incorrect. Refer to Section 7.
 Page 3 of 5
Test: Final Exam Semester 1
Review your answers, feedback, and question scores below. An asterisk (*) indicates
a correct answer.
 Section 7
  31. A programmer creates a PL/SQL subprogram which is compiled and stored in the
database. Two separate users then execute an application which invokes this
subprogram four times. How many times must the subprogram be recompiled? Mark for
Review
(1) Points
    Twice
    Four times
    None (*)
    Eight times
    Once
      Incorrect. Refer to Section 7.
  32. A programmer wants to create a PL/SQL procedure named EMP_PROC. What will
happen when the following code is executed?
CREATE OR REPLACE PROCEDURE emp_proc IS
    v_salary employees.salary%TYPE;
BEGIN
    SELECT salary INTO v_salary FROM employees
       WHERE employee_id = 999;
    DBMS_OUTPUT.PUT_LINE('The salary is: ' || v_salary);
END;
                                       Page 13
```

Mark for Review (1) Points

The statement will raise a NO\_DATA\_FOUND exception because employee\_id 999 does not exist.

The statement will fail because the last line of code should be END emp\_proc;

The statement will fail because you cannot declare variables such as v\_salary inside a procedure.

The procedure will be created successfully. (\*)

The statement will fail because the procedure does not have any parameters.

Incorrect. Refer to Section 7.

33. Which of the following keywords MUST be included in every PL/SQL procedure definition? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

**REPLACE** 

BEGIN (\*)

IS or AS (\*)

**DECLARE** 

END (\*)

Incorrect. Refer to Section 7.

34. Which of the following are characteristics of PL/SQL subprograms but not of anonymous PL/SQL blocks? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

Can take parameters (\*)

Are stored in the database (\*)

Can begin with the keyword DECLARE

Are named (\*)

Are compiled every time they are executed

Incorrect. Refer to Section 7.

35. Which of the following are benefits of using PL/SQL subprograms rather than anonymous blocks? (Choose three.) Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
```

(Choose all correct answers)

Easier to write

Better data security (\*)

Easier code maintenance (\*)

Faster performance (\*)

Do not need to declare variables

Incorrect. Refer to Section 7.

36. The following are the steps involved in creating, and later modifying and re-creating, a PL/SQL procedure in Application Express. In what sequence should these steps be performed?

Retrieve the saved code from "Saved SQL" in SQL Commands Execute the code to create the procedure Execute the code to re-create the procedure Click on the "Save" but sold commands window Modify the code in the SQL Commands window Type the procedure code in the SQL Commands window Mark for Review (1) Points

F,C,A,B,E,D

F,B,D,A,E,C (\*)

E,D,F,C,A,B

F,B,D,E,A,C

F,B,C,D,E,A

Correct

Section 8

37. How do you specify that you want a procedure MYPROCA to use Invoker's Rights? Mark for Review (1) Points

CREATE OR REPLACE PROCEDURE myproca AUTHID CURRENT\_USER IS...

Invoker's Rights are the default, therefore no extra code is needed.

GRANT INVOKER TO myprocA;

ALTER PROCEDURE myproca TO INVOKER;

CREATE OR REPLACE PROCEDURE myproca AUTHID OWNER IS...

Incorrect. Refer to Section 8.

38. User REYHAN creates the following procedure: CREATE PROCEDURE proc1 AUTHID CURRENT\_USER IS v\_count NUMBER; BEGIN SELECT COUNT(\*) INTO v\_count FROM tom.employees; END; User BILL wants to execute this procedure. What privileges will BILL need? Mark for Review (1) Points

EXECUTE on REYHAN.PROC1 and SELECT on TOM.EMPLOYEES (\*)

EXECUTE on REYHAN.PROC1

SELECT on TOM.EMPLOYEES

BILL needs no privileges

None of the above. The procedure will fail to compile because REYHAN does not have SELECT privilege on TOM.EMPLOYEES.

Incorrect. Refer to Section 8.

39. You have created a function named IS\_LEAPYEAR that accepts one IN parameter of datatype DATE and returns a Boolean value (TRUE or FALSE) depending on whether the date is in a leap year. What is wrong with this query:
SELECT last\_name, hire\_date
FROM employees
WHERE is\_leapyear(hire\_date)=TRUE;

Mark for Review

(1) Points

The IS\_LEAPYEAR function must be in the SELECT clause, not the WHERE clause.

You cannot use DATE and BOOLEAN datatypes in the same function.

The SELECT statement returns more than one row.

IS\_LEAPYEAR is a reserved word in the SQL language.

The function returns a Boolean, and therefore cannot be used within a SELECT statement. (\*)

Incorrect. Refer to Section 8.

40. Where can a function be used in a query? Mark for Review (1) Points

Nowhere in a query.

Anywhere in a query. (\*)

PLSQL feedback final exam semister 1 Only in the SELECT clause Only in the WHERE clause In the SELECT or WHERE clauses, but not in the ORDER BY clause. Incorrect. Refer to Section 8. Page 4 of 5 Test: Final Exam Semester 1 Review your answers, feedback, and question scores below. An asterisk (\*) indicates a correct answer. Section 8 41. In which DML statements can user-defined functions be used? Mark for Review (1) Points INSERT and UPDATE, but not DELETE. INSERT only. All DML statements. (\*) UPDATE only DELETE only Correct 42. A function must have at least one IN parameter, and must return exactly one value. Mark for Review (1) Points True False (\*) Correct 43. You have created a function named NEWFUNC. You now change some of the function code, and try to recreate the function by executing: CREATE OR REPLACE FUNCTION newfunc ....; What happens? Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
    The command fails because the function already exists.
    The function is automatically dropped and then recreated. (*)
    The command fails because you should execute: CREATE AND REPLACE ....;
    A second function named NEWFUNC_2 is created.
    The function is dropped but not recreated.
      Correct
  44. A function named MYFUNC has been created. This function accepts one IN
parameter of datatype VARCHAR2 and returns a NUMBER.
You want to invoke the function within the following anonymous block:
DECLARE
v_var1 NUMBER(6,2);
BEGIN
-- Line A
END;
What could be coded at Liine A?
 Mark for Review
(1) Points
    myfunc('Crocodile') := v_var1;
    myfunc(v_var1) := 'Crocodile';
    myfunc(v_var1, 'Crocodile');
    v_var1 := myfunc('Crocodile'); (*)
    myfunc('Crocodile', v_var1);
      Incorrect. Refer to Section 8.
  45. What is wrong with the following code?
CREATE FUNCTION badfunc
(p_param NUMBER(4))
RETURN BOOLEAN
IS BEGIN
RETURN (p_param > 10);
END badfunc;
 Mark for Review
(1) Points
    P_PARAM must be declared AFTER the RETURN clause.
    P_PARAM must have a default value.
    The datatype of the IN parameter cannot have a precision or scale. It must be
NUMBER, not NUMBER(4). (*)
    RETURN (p_param > 10); is wrong because you cannot return an expression.
    The NUMBER datatype must have a scale as well as a precision.
```

Page 18

Incorrect. Refer to Section 8.

46. Why will this function not compile correctly? CREATE FUNCTION bad\_one IS BEGIN RETURN NULL; END bad\_one; Mark for Review (1) Points You cannot RETURN a NULL. You must declare the type of the RETURN before the IS. (\*) You must have at least one IN parameter. You must code CREATE OR REPLACE, not CREATE. The body of the function must contain at least one executable statement (as well as RETURN). Incorrect. Refer to Section 8. 47. Which of the following is a difference between a procedure and a function? Mark for Review (1) Points Functions cannot be nested; procedures can be nested to at least 8 levels. A procedure can have default values for parameters, while a function cannot. An explicit cursor can be declared in a procedure, but not in a function. A function cannot be used within a SQL statement; a procedure can be used within SOL. A function must return a value, a procedure may or may not. (\*) Incorrect. Refer to Section 8. 48. The following code shows the dependencies between three procedures: CREATE PROCEDURE parent IS BEGIN child1; child2; END parent; You now try to execute: DROP PROCEDURE child2; What happens? Mark for Review (1) Points You cannot drop CHILD2 because PARENT is dependent on it. CHILD2 is dropped successfully. PARENT and CHILD1 are both marked INVALID.

Page 19

The database automatically drops PARENT as well.

CHILD2 is dropped successfully. PARENT is marked INVALID. CHILD1 is still valid.

The database automatically drops CHILD1 as well.

Incorrect. Refer to Section 8.

49. Examine the following code (the code of CHILD2 is not shown): CREATE PROCEDURE child1 IS v\_salary employees.salary%TYPE; **BEGIN** SELECT salary INTO v\_salary FROM employees WHERE employee\_id = 9999; **EXCEPTION** WHEN NO\_DATA\_FOUND THEN NULL; END child1; CREATE PROCEDURE parent IS BEGIN child1; child2; **EXCEPTION** WHEN NO\_DATA\_FOUND THEN NULL; Employee\_id 9999 does not exist. What happens when PARENT is executed? Mark for Review (1) Points

CHILD1 handles the exception successfully and ends. PARENT continues to execute and invokes CHILD2. (\*)

CHILD1 ends abruptly, PARENT handles the exception successfully and ends. CHILD2 does not execute.

CHILD1 ends abruptly, then PARENT also ends abruptly with an unhandled exception.

PARENT handles the exception, then CHILD1 resumes execution.

PARENT fails to compile because you cannot have the same exception handler in two separate subprograms.

Incorrect. Refer to Section 8.

50. You want to remove the procedure NO\_NEED from your schema. You execute: DROP PROCEDURE no\_need; Which Data Dictionary views are updated automatically?

Mark for Review
(1) Points

USER PROCEDURES

USER\_OBJECTS

USER\_SOURCE

All of the above. (\*)

```
None of the above.
      Correct
 Page 5 of 5
  8. What will be the value of v_sal_desc after the following code is executed?
DECLARE
    v_salary NUMBER(6,2) := NULL;
    v_{sal}_{desc} VARCHAR2(10);
BEGIN
    CASE
       WHEN v_salary < 10000 THEN v_sal_desc := 'Low Paid';
       WHEN v_salary >= 10000 THEN v_sal_desc := 'High Paid';
    END CASE;
END;
    High Paid
    Low Paid
    Nu11
    The code will fail and return an exception (*)
  19. Examine the following code:
DECLARE
    a BOOLEAN := TRUE;
    b BOOLEAN := FALSE;
    c BOOLEAN := TRUE;
    d BOOLEAN := FALSE;
    game char(4) := 'lost';
    IF ((a AND b) AND (c OR d))
THEN game := 'won';
    END IF;
What is the value of GAME at the end of this block?
    NULL
    won'
    lost' (*)
    False
  23. Examine the following code:
DECLARE
v_bool BOOLEAN := FALSE;
v_{counter} NUMBER(4) := 0;
BEGIN
... Line A
                                         Page 21
```

```
PLSQL feedback final exam semister 1
END;
which of the following is NOT valid at line A?
    WHILE NOT v_boolean LOOP
    WHILE v_boolean AND v_counter < 6 LOOP
    WHILE v_counter > 8 LOOP
    WHILE v_counter IN 1..5 LOOP (*)
  35. The employees table contains 20 rows. What will happen when the following
code is executed?
DECLARE
   CURSOR emp_curs IS
      SELECT job_id FROM employees;
    v_job_id employees.job_id%TYPE;
BEGIN
    OPEN emp_curs;
    L00P
       FETCH emp_curs INTO v_job_id;
       DBMS_OUTPUT.PUT_LINE(v_job_id);
       EXIT WHEN emp_curs%NOTFOUND;
    END LOOP;
    CLOSE emp_curs;
END;
    20 job_ids will be displayed.
    The block will fail and an error message will be displayed.
    21 rows of output will be displayed; the first job_id will be displayed twice.
    21 rows of output will be displayed; the last job_id will be displayed twice.
(*)
    8. What will be the value of v_sal_desc after the following code is executed?
DECLARE
    v_{salary} NUMBER(6,2) := NULL;
    v_sal_desc VARCHAR2(10);
BEGIN
    CASE
       WHEN v_salary < 10000 THEN v_sal_desc := 'Low Paid';
       WHEN v_salary >= 10000 THEN v_sal_desc := 'High Paid';
    END CASE;
END;
    High Paid
    Low Paid
    Nu11
    The code will fail and return an exception (*)
```

```
19. Examine the following code:
DECLARE
    a BOOLEAN := TRUE;
    b BOOLEAN := FALSE;
    c BOOLEAN := TRUE;
    d BOOLEAN := FALSE;
game char(4) := 'lost';
BEGIN
    IF ((a AND b) AND (c OR d))
    THEN game := 'won';
    END IF;
What is the value of GAME at the end of this block?
    NULL
    won'
    lost' (*)
    False
  23. Examine the following code:
DECLARE
v_bool BOOLEAN := FALSE;
v_{counter} NUMBER(4) := 0;
BEGIN
... Line A
END;
which of the following is NOT valid at line A?
    WHILE NOT v_boolean LOOP
    WHILE v_boolean AND v_counter < 6 LOOP
    WHILE v_counter > 8 LOOP
    WHILE v_counter IN 1..5 LOOP (*)
  35. The employees table contains 20 rows. What will happen when the following
code is executed?
DECLARE
   CURSOR emp_curs IS
    SELECT job_id FROM employees; v_job_id employees.job_id%TYPE;
BEGIN
    OPEN emp_curs;
    L<sub>0</sub>0P
       FETCH emp_curs INTO v_job_id;
       DBMS_OUTPUT.PUT_LINE(v_job_id);
       EXIT WHEN emp_curs%NOTFOUND;
    END LOOP;
    CLOSE emp_curs;
END;
    20 job_ids will be displayed.
    The block will fail and an error message will be displayed.
                                          Page 23
```

```
PLSQL feedback final exam semister 1
    21 rows of output will be displayed; the first job_id will be displayed twice.
    21 rows of output will be displayed; the last job_id will be displayed twice.
  8. What will be the value of v_sal_desc after the following code is executed?
DECLARE
    v_salary NUMBER(6,2) := NULL;
    v_sal_desc VARCHAR2(10);
BEGIN
    CASE
       WHEN v_salary < 10000 THEN v_sal_desc := 'Low Paid';
       WHEN v_salary >= 10000 THEN v_sal_desc := 'High Paid';
    END CASE;
END;
    High Paid
    Low Paid
    Null
    The code will fail and return an exception (*)
  19. Examine the following code:
DECLARE
    a BOOLEAN := TRUE;
    b BOOLEAN := FALSE;
    c BOOLEAN := TRUE;
    d BOOLEAN := FALSE;
    game char(4) := 'lost';
BEGIN
    IF ((a AND b) AND (c OR d))
THEN game := 'won';
    END IF;
What is the value of GAME at the end of this block?
    NULL
    won'
    lost' (*)
    False
      Examine the following code:
  23.
DECLARE
v_bool BOOLEAN := FALSE;
v_{counter} NUMBER(4) := 0;
BEGIN
... Line A
END;
which of the following is NOT valid at line A?
```

WHILE NOT v\_boolean LOOP

```
PLSQL feedback final exam semister 1
    WHILE v_boolean AND v_counter < 6 LOOP
    WHILE v_counter > 8 LOOP
    WHILE v_counter IN 1..5 LOOP (*)
      The employees table contains 20 rows. What will happen when the following
code is executed?
DECLARE
   CURSOR emp_curs IS
    SELECT job_id FROM employees; v_job_id employees.job_id%TYPE;
BEGIN
    OPEN emp_curs;
    L<sub>0</sub>0P
       FETCH emp_curs INTO v_job_id;
       DBMS_OUTPUT.PUT_LINE(v_job_id);
       EXIT WHEN emp_curs%NOTFOUND;
    END LOOP;
    CLOSE emp_curs;
END:
    20 job_ids will be displayed.
    The block will fail and an error message will be displayed.
    21 rows of output will be displayed; the first job_id will be displayed twice.
    21 rows of output will be displayed; the last job_id will be displayed twice.
(*)
Test: Final Exam Semester 1
Review your answers, feedback, and question scores below. An asterisk (*) indicates
a correct answer.
 Section 6
  1. There are no employees in department 75. What will be displayed when this code
is executed?
DECLARE
    v_last_name employees.last_name%TYPE;
BEGIN
    DBMS_OUTPUT.PUT_LINE('A');
    BEGIN
       SELECT last_name INTO v_last_name
          FROM employees WHERE department_id = 75;
       DBMS_OUTPUT.PUT_LINE('B');
    END;
    DBMS_OUTPUT.PUT_LINE('C');
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE('D');
END;
                                        Page 25
```

```
Mark for Review
(1) Points
    Α
C
D
    Α
(*)
    Α
    Α
В
D
    None of the above
      Incorrect. Refer to Section 6.
  2. What will be displayed when the following code is executed?
<<outer>>
DECLARE
    v_myvar NUMBER;
BEGIN
    v_myvar := 10;
    DECLARE
        v_myvar NUMBER := 200;
       outer.v_myvar := 20;
v_myvar := v_myvar / 0; -- this raises a ZERO_DIVIDE error
outer.v_myvar := 30;
    END;
    v_myvar := 40;
EXCEPTION
    WHEN ZERO_DIVIDE THEN
        DBMS_OUTPUT.PUT_LINE(v_myvar);
END;
Mark for Review
(1) Points
    10
    20 (*)
    30
    40
    200
      Incorrect. Refer to Section 6.
```

```
3. What will happen when the following code is executed?
BEGIN -- outer block
    DECLARE -- inner block
       CURSOR emp_curs IS SELECT * FROM employees;
       v_emp_rec emp_curs%ROWTYPE;
    BEGIN
       OPEN emp_curs;
       L00P
          FETCH emp_curs INTO v_emp_rec;
          DBMS_OUTPUT.PUT_LINE(v_emp_rec.salary);
       END LOOP;
    END;
    CLOSE emp_curs;
END:
Mark for Review
(1) Points
    The code will fail because you cannot declare a cursor in an inner block.
    The code will fail because the cursor is declared in the inner block but is
referenced in the outer block. (*)
    The code will execute successfully and display all the employees' salaries.
    The code will execute forever because there is no statement to EXIT from the
loop.
      Incorrect. Refer to Section 6.
  4. What will happen when the following code is executed?
DECLARE
    e_excep1 EXCEPTION;
    e_excep2 EXCEPTION;
BEGIN
    RAISE e_excep1;
EXCEPTION
    WHEN e_excep1 THEN BEGIN
       RAISE e_excep2; END;
END;
Mark for Review
(1) Points
    It will fail to compile because you cannot have a subblock inside an exception
section.
```

It will fail to compile because e\_excep1 is out of scope in the subblock.

It will fail to compile because you cannot declare more than one exception in the same block.

It will compile successfully and return an unhandled e\_excep2 to the calling environment. (\*)

Incorrect. Refer to Section 6.

```
PLSQL feedback final exam semister 1
  5. Examine the following code which shows three levels of nested block. What is
the scope of the variable v_middle_var?
DECLARE -- outer block
    v_outer_var NUMBER;
BEGIN
    DECLARE -- middle block
       v_middle_var NUMBER;
    BEGIN
       DECLARE -- inner block
          v_inner_var NUMBER;
       BEGIN
       END:
    END;
END;
Mark for Review
(1) Points
    All three blocks
    Middle and outer blocks only
    Middle and inner blocks only (*)
    Middle block only
    None of the above
      Incorrect. Refer to Section 6.
  6. What will happen when the following code is executed?
DECLARE
    e_outer_excep EXCEPTION;
BEGIN
    DECLARE
       e_inner_excep EXCEPTION;
    BEGIN
       RAISE e_outer_excep;
    END;
EXCEPTION
    WHEN e_outer_excep THEN
       DBMS_OUTPUT.PUT_LINE('Outer raised');
    WHEN e_inner_excep THEN
       DBMS_OUTPUT.PUT_LINE('Inner raised');
END;
 Mark for Review
(1) Points
    The code will fail to compile because e_inner_excep cannot be referenced in the
outer block. (*)
    The code will propagate the e_outer_excep back to the calling environment.
    The code will execute successfully and 'Outer Raised' will be displayed.
    The code will fail to compile because e_inner_excep was declared but never
RAISEd.
```

PLSQL feedback final exam semister 1 Incorrect. Refer to Section 6.

7. An attempt to update an employee's salary to a negative value will violate a check constraint and raise an ORA-02290 exception. Which of the following is a correct definition of a handler for this exception? Mark for Review (1) Points **DECLARE** e\_sal\_excep EXCEPTION; PRAGMA EXCEPTION\_INIT(-02290,e\_sal\_excep); **DECLARE** PRAGMA EXCEPTION\_INIT(e\_sal\_excep, -02290); e\_sal\_excep EXCEPTION; **DECLARE** e\_sal\_excep EXCEPTION; PRAGMA EXCEPTION\_INIT(e\_sal\_excep, -02290); **DECLARE** e\_sal\_excep EXCEPTION; PRAGMA\_EXCEPTION\_INIT(e\_sal\_exception,-02290); **DECLARE** e\_sal\_excep EXCEPTION; PRAGMA EXCEPTION\_INIT(e\_sal\_excep,02290); Incorrect. Refer to Section 6. 8. Examine the followiing code. Which exception handlers would successfully trap the exception which will be raised when this code is executed? (Choose two.) **DECLARE** CURSOR emp\_curs IS SELECT \* FROM employees; v\_emp\_rec emp\_curs%ROWTYPE; **BEGIN** FETCH emp\_curs INTO v\_emp\_rec; OPEN emp\_curs; CLOSE emp\_curs; EXCEPTION ... END; Mark for Review (1) Points (Choose all correct answers) WHEN CURSOR\_NOT\_OPEN WHEN INVALID\_CURSOR (\*) WHEN OTHERS (\*) WHEN NO\_DATA\_FOUND

WHEN INVALID\_FETCH

Incorrect. Refer to Section 6.

9. Which of the following best describes a predefined Oracle Server error? Mark for Review (1) Points

Has a standard Oracle error number but must be named by the PL/SQL programmer

Is not raised automatically but must be declared and raised explicitly by the PL/SQL programmer

Has a standard Oracle error number and a standard name which can be referenced in the EXCEPTION section (\*)

Is associated with an Oracle error number using PRAGMA EXCEPTION\_INIT

Incorrect. Refer to Section 6.

10. Which of the following are examples of predefined Oracle Server errors? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

TOO\_MANY\_ROWS (\*)

NO\_DATA\_FOUND (\*)

**OTHERS** 

ZERO\_DIVIDE (\*)

**E\_INSERT\_EXCEP** 

Incorrect. Refer to Section 6.

Page 1 of 5

Test: Final Exam Semester 1

Review your answers, feedback, and question scores below. An asterisk (\*) indicates a correct answer.

Section 6

11. An attempt to insert a null value into a NOT NULL table column raises an ORA-01400 exception. How can you code an exception handler to trap this exception?

Page 30

```
PLSQL feedback final exam semister 1
```

Mark for Review (1) Points

Test for WHEN ORA-1400 in the exception section.

Declare a variable e\_null\_excep of type EXCEPTION, associate it with ORA-01400 using a PRAGMA directive, and test for WHEN e\_null\_excep in the exception section. (\*)

Declare a variable e\_null\_excep of type VARCHAR2, associate it with ORA-01400 using a PRAGMA directive, and test for WHEN e\_null\_excep in the exception section.

Declare a variable as follows:  $e_null_excep$  EXCEPTION := -01400; Then test for WHEN  $e_null_excep$  in the exception section.

Correct

12. Examine the following code fragment. At Line A, you want to raise an exception if the fetched salary value is greater than 30000. How can you do this? DECLARE

v\_salary employees.salary%TYPE;

**BEGIN** 

SELECT salary INTO v\_salary FROM employees
WHERE employee\_id = 100;
IF v\_salary > 30000 THEN
-- Line A
END IF;

. .

Mark for Review

(1) Points

Test for WHEN VALUE\_TOO\_HIGH in the exception section.

Use RAISE\_APPLICATION\_ERROR to raise an exception explicitly. (\*)

Test for WHEN OTHERS in the exception section, because WHEN OTHERS traps all exceptions.

Define an EXCEPTION variable and associate it with an Oracle Server error number using PRAGMA EXCEPTION\_INIT.

Correct

13. Department-id 99 does not exist. What will be displayed when the following code is executed?

**DECLARE** 

 $\label{eq:v_depthame} $$v\_deptname $ departments.department_name %TYPE; $$BEGIN$$ 

SELECT department\_name INTO v\_deptname
FROM departments WHERE department\_id = 99;

**EXCEPTION** 

WHEN NO\_DATA\_FOUND THEN

RAISE\_APPLICATION\_ERROR(-20201, 'Department does not exist');

END;

Mark for Review

(1) Points

ORA-01403: No Data Found ORA-20201: Department does not exist Page 31

```
ORA-01403: No Data Found
    ORA-20201: Department does not exist (*)
    None of the above
      Incorrect. Refer to Section 6.
  14. A user-defined exception must be declared as a variable of data type
EXCEPTION. True or False? Mark for Review
(1) Points
    True (*)
    False
      Correct
  15. There are no employees in department_id 99. What output will be displayed
when the following code is executed?
DECLARE
    v_count NUMBER;
BEGIN
    SELECT COUNT(*) INTO v_count
       FROM employees WHERE department_id = 99;
    IF v_{count} = 0 THEN
       RAISE NO_DATA_FOUND;
       DBMS_OUTPUT.PUT_LINÉ('No employees found');
    END IF;
EXCEPTION
   WHEN NO_DATA_FOUND THEN
       DBMS_OUTPUT.PUT_LINE('Department 99 is empty');
END;
Mark for Review
(1) Points
    No employees found
    No employees found Department 99 is empty
    Department 99 is empty (*)
    The block will fail because you cannot explicitly RAISE a predefined Oracle
Server error such as NO_DATA_FOUND
      Incorrect. Refer to Section 6.
  16. There are no employees in department 99. What message or messages will be
displayed when the following code is executed?
DECLARE
    e_my_excep EXCEPTION;
BEGIN
    BEGIN
       UPDATE employees SET salary = 10000
         WHERE department_id = 99;
                                       Page 32
```

```
PLSQL feedback final exam semister 1
       IF SQL\%ROWCOUNT = 0 THEN
          RAISE e_my_excep;
       END IF;
    EXCEPTION
       WHEN e_my_excep THEN
          DBMS_OUTPUT.PUT_LINE('Message 1');
          RAISE e_my_excep;
          DBMS_OUTPUT.PUT_LINE('Message 2');
    END;
    DBMS_OUTPUT.PUT_LINE('Message 3');
EXCEPTION
    WHEN e_my_excep THEN
       DBMS_OUTPUT.PUT_LINE('Message 4');
END;
Mark for Review
(1) Points
    Message 1
Message 3
    Message 1
Message 2
    Message 1
Message 3
Message 4
    Message 1
Message 4
(*)
      Incorrect. Refer to Section 6.
      Which of the following EXCEPTION sections are constructed correctly? (Choose
two.) Mark for Review
(1) Points
   (Choose all correct answers)
    EXCEPTION
    WHEN NO_DATA_FOUND THEN statement_1;
    WHEN OTHERS THEN statement_2;
END;
(*)
    EXCEPTION
    WHEN OTHERS THEN statement_2;
    WHEN NO_DATA_FOUND THEN statement_1;
END;
    EXCEPTION
    WHEN NO_DATA_FOUND THEN statement_1;
    WHEN NO_DATA_FOUND THEN statement_2;
    WHEN OTHERS THEN statement_3;
                                       Page 33
```

```
PLSQL feedback final exam semister 1
END;
    EXCEPTION
    WHEN OTHERS THEN statement_1;
END;
(*)
      Incorrect. Refer to Section 6.
18. Which of the following are good practice guidelines for exception handling? (Choose three.) Mark for Review
(1) Points
   (Choose all correct answers)
    Test your code with different combinations of data to see what potential errors
can happen. (*)
    Use an exception handler whenever there is any possibility of an error
occurring. (*)
    Include a WHEN OTHERS handler as the first handler in the exception section.
    Allow exceptions to propagate back to the calling environment.
    Handle specific named exceptions where possible, instead of relying on WHEN
OTHERS. (*)
      Incorrect. Refer to Section 6.
  19. Examine the following code. Why does the exception handler not follow good
practice guidelines?
DECLARE
    v_salary employees.salary%TYPE;
BEGIN
    SELECT salary INTO v_salary FROM employees
       WHERE employee_id = 999;
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE('An error occurred');
END;
 Mark for Review
(1) Points
    You should not use DBMS_OUTPUT.PUT_LINE in an exception handler.
    employee_id 999 does not exist in the employees table.
```

The exception handler should test for the named exception NO\_DATA\_FOUND. (\*) The exception handler should COMMIT the transaction.

Incorrect, Refer to Section 6.

20. Which of the following is NOT an advantage of including an exception handler in a PL/SQL block? Mark for Review (1) Points

Protects the database from errors

Code is more readable because error-handling routines can be written in the same block in which the error occurred

Prevents errors from occurring (\*)

Avoids costly and time-consuming correction of mistakes

Incorrect. Refer to Section 6.

Page 2 of 5

Test: Final Exam Semester 1

Review your answers, feedback, and question scores below. An asterisk (\*) indicates a correct answer.

Section 7

21. The following are the steps involved in creating, and later modifying and re-creating, a PL/SQL procedure in Application Express. In what sequence should these steps be performed?

Retrieve the saved code from "Saved SQL" in SQL Commands Execute the code to create the procedure Execute the code to re-create the procedure Click on the "Save" button and save the procedure code Modify the code in the SQL Commands window Type the procedure code in the SQL Commands window Mark for Review (1) Points

F,C,A,B,E,D

F,B,D,A,E,C (\*)

E,D,F,C,A,B

F,B,D,E,A,C

F,B,C,D,E,A

Incorrect. Refer to Section 7.

22. A programmer creates a PL/SQL subprogram which is compiled and stored in the database. Two separate users then execute an application which invokes this

Page 35

PLSQL feedback final exam semister 1 subprogram four times. How many times must the subprogram be recompiled? Mark for Review

(1) Points

Twice

Four times

None (\*)

Eight times

Once

Incorrect. Refer to Section 7.

23. A PL/SQL procedure named MYPROC has already been created and stored in the database. Which of the following will successfully re-create the procedure after some changes have been made to the code? Mark for Review (1) Points

CREATE PROCEDURE myproc IS ...

CREATE OR REPLACE PROCEDURE myproc IS .... (\*)

UPDATE PROCEDURE myproc IS ...

ALTER PROCEDURE myproc IS ...

None of the above, because the procedure must be dropped before it can be re-created.

Incorrect. Refer to Section 7.

24. Which of the following are benefits of using PL/SQL subprograms rather than anonymous blocks? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

Easier to write

Better data security (\*)

Easier code maintenance (\*)

Faster performance (\*)

Do not need to declare variables

Incorrect. Refer to Section 7.

25. A PL/SQL procedure named MY\_PROC1 has been successfully created in the database. The procedure has no parameters. Which of the following will successfully invoke the procedure in Application Express? (Choose two.) Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
   (Choose all correct answers)
    DECLARE
    v_var1 NUMBER := 20;
BEGIN
   my_proc1(v_var1);
END;
    EXECUTE my_proc1;
    BEGIN
   my_proc1;
END;
(*)
    CREATE OR REPLACE PROCEDURE my_proc2 IS
BEGIN
   my_proc1;
END my_proc2;
(*)
    SELECT my_proc1 FROM DUAL;
      Incorrect. Refer to Section 7.
  26. Which of the following are characteristics of PL/SQL stored procedures?
(Choose three.) Mark for Review
(1) Points
   (Choose all correct answers)
   They are named PL/SQL blocks (*)
    They must return exactly one value to the calling environment.
    They can have an exception section. (*)
    They can be invoked from inside a SQL statement.
    They can accept parameters. (*)
      Incorrect. Refer to Section 7.
  27. Procedure SOMEPROC has five parameters named A, B, C, D, E in that order. The
procedure was called as follows:
SOMEPROC(10,20,D=>50);
How was parameter D referenced?
Mark for Review
(1) Points
    Positionally
    Named (*)
```

```
A combination of positionally and named
    A combination of named and defaulted
    Defaulted
       Incorrect. Refer to Section 7.
  28. Which parameter mode is the default? Mark for Review
(1) Points
    IN (*)
    OUT
    NUMBER
    VARIABLE
    CONSTANT
      Incorrect. Refer to Section 7.
29. The following procedure has been created: CREATE OR REPLACE PROCEDURE defproc
(A IN NUMBER := 50,
B IN NUMBER,
C IN NUMBER DEFAULT 40)
IS ....
Which one of the following will invoke the procedure correctly?
Mark for Review
(1) Points
    defproc(30 \Rightarrow A);
    defproc(30, 60 \Rightarrow C);
    defproc(40, 70); (*)
    defproc(10 \Rightarrow A, 25 \Rightarrow C);
    defproc;
      Correct
  30. Procedure SOMEPROC has five parameters named A, B, C, D, E in that order. The
procedure was called as follows:
SOMEPROC(10,20,D=>50);
How was parameter B referenced?
Mark for Review
(1) Points
    Positional (*)
    Named
```

```
PLSQL feedback final exam semister 1
    A combination of positionally and named
    A combination of named and defaulted
    Defaulted
      Correct
 Page 3 of 5
Test: Final Exam Semester 1
Review your answers, feedback, and question scores below. An asterisk (*) indicates
a correct answer.
 Section 7
  31. Which of the following best describes how an IN parameter affects a
procedure? Mark for Review
(1) Points
    It describes the order in which the procedure's statements should be executed.
    It describes which parts of the procedure's code are optional or conditional.
```

It makes the procedure execute faster.

It passes a value into the procedure when the procedure is invoked. (\*)

It allows complex calculations to be executed inside the procedure.

Incorrect. Refer to Section 7.

```
32. You have created the following procedure:
CREATE OR REPLACE PROCEDURE double_it
(p_param IN OUT NUMBER)
IS
BEGIN
p_param := p_param * 2;
Which of the following anonymous blocks invokes this procedure successfully? Mark
for Review
(1) Points
EXECUTE double_it(20);
END;
    BEGIN
SELECT double_it(20)
```

```
PLSQL feedback final exam semister 1
FROM DUAL;
END;
    DECLARE
v_result NUMBER(6);
BEGIN
v_result := double_it(20);
END;
    DECLARE
v_result NUMBER(6) := 20;
BEGIN
double_it(v_result);
END; (*)
    BEGIN
double_it(20);
END;
      Incorrect. Refer to Section 7.
  33. Examine the following procedure:
CREATE OR REPLACE PROCEDURE smallproc
(p_param IN NUMBER)
IS
BEGIN ....
The procedure is invoked by:
DECLARE
v_param NUMBER := 20;
BEGIN
smallproc(v_param);
END;
Which of the following statements is true? Mark for Review
(1) Points
    p_param is a parameter and v_param is an argument
    p_param is a formal parameter and 20 is an actual parameter
    p_param is a formal parameter and v_param is an actual parameter (*)
    p_param and v_param are both formal parameters, while 20 is an actual parameter
    p_param is an actual parameter and v_param is a formal parameter
      Incorrect. Refer to Section 7.
  34. Which of the following is NOT correct coding for a procedure parameter? Mark
for Review
(1) Points
    (p_param IN VARCHAR2)
    (p_param VARCHAR2)
    (p_param VARCHAR2(50)) (*)
    (p_param employees.last_name%TYPE)
```

```
(p_param IN OUT VARCHAR2)
      Correct
  35. You want to create a procedure named SOMEPROC which accepts a single
parameter named SOMEPARM. The parameter can be up to 100 characters long. Which of
the following is correct syntax to do this? Mark for Review
(1) Points
    CREATE PROCEDURE someproc
    (someparm varchar2)
BEGIN ...
(*)
    CREATE PROCEDURE someproc
    (someparm varchar2(100))
IS
BEGIN...
    CREATE PROCEDURE someproc
IS
    (someparm VARCHAR2)
BEGIN...
    CREATE PROCEDURE someproc
    someparm varchar2(100);
IS
    BEGIN...
    CREATE PROCEDURE someproc
    (someparm 100)
TS
BEGIN ...
      Correct
  36. You have created a procedure named MYPROC that accepts three IN parameters A,
B, and C (all numbers). Which of the following calls to MYPROC is NOT correct? Mark
for Review (1) Points
    myproc(5,10,20);
    myproc(a=>5,b=>10,20) (*)
    myproc(a=>5,b=>10,c=>20)
    myproc(5, 10, c => 20)
      Incorrect. Refer to Section 7.
```

#### Section 8

37. Which of the following is a difference between a procedure and a function? Mark for Review (1) Points

Functions cannot be nested; procedures can be nested to at least 8 levels.

A procedure can have default values for parameters, while a function cannot.

An explicit cursor can be declared in a procedure, but not in a function.

A function cannot be used within a SQL statement; a procedure can be used within SQL.

A function must return a value, a procedure may or may not. (\*)

Incorrect. Refer to Section 8.

38. In a SELECT statement, where can a function NOT be used? Mark for Review (1) Points

In a GROUP BY or HAVING clause.

A function can be used anywhere in a SELECT statement. (\*)

In a WHERE clause.

In the column list (SELECT) clause.

In an ORDER BY clause.

Correct

39. You have created a function named NEWFUNC. You now change some of the function code, and try to recreate the function by executing:
CREATE OR REPLACE FUNCTION newfunc ....;
What happens?
Mark for Review
(1) Points

The command fails because the function already exists.

The function is automatically dropped and then recreated. (\*)

The command fails because you should execute: CREATE AND REPLACE ....;

A second function named NEWFUNC\_2 is created.

The function is dropped but not recreated.

Incorrect. Refer to Section 8.

40. Examine the following code: CREATE OR REPLACE FUNCTION add\_func (p\_param1 NUMBER, p\_param2 NUMBER)

PLSQL feedback final exam semister 1

RETURN NUMBER
IS
BEGIN
RETURN (p\_param1 + p\_param2);
END;
What will be displayed when the following SQL statement is executed?

SELECT add\_func(6, add\_func(3,8)) FROM dual;
Mark for Review
(1) Points

23

11

66

17 (\*)

An error message will be displayed because you cannot nest user-defined functions.

Incorrect. Refer to Section 8.

Page 4 of 5

Test: Final Exam Semester 1

Review your answers, feedback, and question scores below. An asterisk (\*) indicates a correct answer.

Section 8

- 41. Which of the following is a difference between a procedure and a function? Mark for Review (1) Points
  - A procedure can include DML statements, but a function cannot.
- A function must have at least one IN parameter, while parameters are optional for a procedure.
  - A procedure can return a BOOLEAN datatype, while a function cannot.
  - A function can be used inside a SQL statement, while a procedure cannot. (\*)
  - A procedure can include an EXCEPTION section, while a function cannot.

Incorrect. Refer to Section 8.

42. You try to create a function named MYFUNC. The function does not compile correctly because there are errors in your code. Which Dictionary view can you query Page 43

```
PLSQL feedback final exam semister 1
to see the errors? Mark for Review
(1) Points
    USER_SOURCE
    USER_ERRORS (*)
    USER_OBJECTS
    USER_DEPENDENCIES
    USER_COMPILES
      Incorrect. Refer to Section 8.
  43. Examine the following code (the code of CHILD2 is not shown):
CREATE PROCEDURE child1
IS v_salary employees.salary%TYPE;
BEGIN
SELECT salary INTO v_salary FROM employees WHERE employee_id = 9999;
EXCEPTION
WHEN NO_DATA_FOUND THEN NULL;
END child1;
CREATE PROCEDURE parent
IS BEGIN
child1;
child2;
EXCEPTION
WHEN NO_DATA_FOUND THEN NULL;
END parent;
Employee_id 9999 does not exist. What happens when PARENT is executed?
Mark for Review
(1) Points
    CHILD1 handles the exception successfully and ends. PARENT continues to execute
and invokes CHILD2. (*)
    CHILD1 ends abruptly, PARENT handles the exception successfully and ends. CHILD2
does not execute.
    CHILD1 ends abruptly, then PARENT also ends abruptly with an unhandled
exception.
    PARENT handles the exception, then CHILD1 resumes execution.
    PARENT fails to compile because you cannot have the same exception handler in
two separate subprograms.
      Correct
  44. Which Data Dictionary view can be used to display the detailed code of a
procedure in your schema? Mark for Review
(1) Points
    USER_PROCEDURES
    USER_OBJECTS
                                        Page 44
```

USER\_SOURCE (\*)

USER\_SUBPROGRAMS

None of the above.

Correct

45. You want to see the names, modes and data types of the formal parameters of function MY\_FUNC in your schema. How can you do this? (Choose two) Mark for Review (1) Points

(Choose all correct answers)

Query USER\_PARAMETERS

Query USER\_SOURCE (\*)

Query USER\_FUNCTIONS

SHOW PARAMETER my\_funct;

DESCRIBE my\_funct; (\*)

Incorrect. Refer to Section 8.

46. How do you specify that you want a procedure MYPROCA to use "Definer's Rights"? Mark for Review (1) Points

CREATE OR REPLACE PROCEDURE myproca AUTHID CURRENT\_USER IS...

CREATE OR REPLACE PROCEDURE myproca AUTHID OWNER IS...

GRANT DEFINER TO myprocA;

ALTER PROCEDURE myproca TO DEFINER;

Definer's Rights are the default, therefore no extra code or commands are needed. (\*)

Incorrect. Refer to Section 8.

47. User REYHAN creates the following procedure: CREATE PROCEDURE proc1 AUTHID CURRENT\_USER IS v\_count NUMBER; BEGIN SELECT COUNT(\*) INTO v\_count FROM tom.employees; END; User BILL wants to execute this procedure. What privileges will BILL need? Mark for Review (1) Points

EXECUTE on REYHAN.PROC1 and SELECT on TOM.EMPLOYEES (\*)
Page 45

EXECUTE on REYHAN.PROC1

SELECT on TOM.EMPLOYEES

BILL needs no privileges

None of the above. The procedure will fail to compile because REYHAN does not have SELECT privilege on TOM.EMPLOYEES.

Incorrect. Refer to Section 8.

48. What is one of the advantages of using user-defined functions in a SQL statement? Mark for Review (1) Points

They automate repetitive formulas which otherwise you would have to type in full every time you used them. (\*)

They execute faster than system-defined functions such as UPPER and LOWER.

They allow you to execute DML from inside a SELECT statement.

They allow you to use functions which return a BOOLEAN.

They are stored on your local PC, not in the database.

Incorrect. Refer to Section 8.

49. Which of the following are NOT allowed in a function which is used inside a SQL statement which updates the EMPLOYEES table? (Choose two). Mark for Review (1) Points

(Choose all correct answers)

SELECT .... FROM departments ....;

COMMIT; (\*)

A RETURN statement.

DDL statements such as CREATE or ALTER. (\*)

A WHEN OTHERS exception handler.

Incorrect. Refer to Section 8.

50. Which one of the following statements about user-defined functions is NOT true? Mark for Review (1) Points

They can execute spell-checking routines.

They can be used inside SQL statements.

They can be combined (nested) together, similar to nesting system functions, for example INITCAP(SUBSTR(....)).

They can return a TIMESTAMP datatype.

They can allow you to COMMIT from inside a SELECT statement. (\*)

Incorrect. Refer to Section 8.

Page 5 of 5

You can create a Web site application written entirely in PL/SQL. True or False? Mark for Review (1) Points

True (\*)

Which of the following can be done using PL/SQL?

Mark for Review

(1) Points

Create complex applications.

Retrieve and modify data in Oracle database tables.

Manage database tasks such as security.

Create custom reports.

All of the above (\*)
When multiple SQL statements are combined into PL/SQL blocks, performance improves.
True or False? Mark for Review
(1) Points

True (\*)

PL/SQL differs from C and Java in which of the following ways? (Choose two.)

Mark for Review
(1) Points

(Choose all correct answers)

It requires an Oracle database or tool. (\*)

It does not support object-oriented programming.
Page 47

```
PLSQL feedback final exam semister 1
```

It is the most efficient language to use with an Oracle database. (\*)

It is the most complex programming language to learn.

It is not portable to other operating systems

Which of the following can be compiled as a standalone program outside the database? Mark for Review
(1) Points

A program developed in PL/SQL

A program developed in Java

A program developed in C

All the above

Programs developed in Java or C, but not in PL/SQL. (\*)

Procedural constructs give you better control of your SQL statements and their execution. True or False? Mark for Review (1) Points

True (\*)

False

You can create a Web site application written entirely in PL/SQL. True or False? Mark for Review (1) Points

True (\*)

False

PL/SQL differs from C and Java in which of the following ways? (Choose two.)
Mark for Review

(1) Points

(Choose all correct answers)

It requires an Oracle database or tool. (\*)

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It is the most efficient language to use with an Oracle database. (\*)

It is the most complex programming language to learn.

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Create complex applications.

Retrieve and modify data in Oracle database tables.

Manage database tasks such as security.

Create custom reports. All of the above (\*)

When multiple SQL statements are combined into PL/SQL blocks, performance improves. True or False? Mark for Review
(1) Points

True (\*)

False

Procedural constructs give you better control of your SQL statements and their execution. True or False?

Mark for Review
(1) Points

True (\*)

False

Incorrect Incorrect. Refer to Section 1.
Which of the following can be compiled as a standalone program outside the database?
Mark for Review
(1) Points

A program developed in PL/SQL

A program developed in Java

A program developed in C

```
PLSQL feedback final exam semister 1
       All the above
        Programs developed in Java or C, but not in PL/SQL. (*)
How can you display results to check that a PL/SQL block is working correctly? Mark
for Review
(1) Points
       You don't need to do anything, the results will display automatically.
        Use an Exception section
        Use DBMS_OUTPUT.PUT_LINE (*)
       Write a C or Java program to display the results
Which statements are mandatory in a PL/SQL block? (Choose two.)
                                                                       Mark for
Review
(1) Points
                        (Choose all correct answers)
        DECLARE
        BEGIN (*)
        EXCEPTION
       END; (*)
What are the characteristics of an anonymous block? (Choose two.)
                                                                   Mark for
Review
(1) Points
                        (Choose all correct answers)
        Unamed (*)
        Stored in the database
        Compiled each time the application is executed (*)
       Can be declared as procedures or as functions
       What are the characteristics of a PL/SQL stored subprogram? (Choose two.)
Mark for Review
(1) Points
                        (Choose all correct answers)
```

```
Named (*)
        Not stored in the database
        Can be invoked at any time (*)
        Do not exist after they are executed
which of the following is NOT a PL/SQL programming environment?
                                                                   Mark for
Review
(1) Points
        Oracle jDeveloper
        SQL*Plus
        gSQL*Plus (*)
        SQL Workshop in Application Express
Incorrect
                         Incorrect. Refer to Section
What is wrong with this PL/SQL anonymous block?
BEGIN
    DBMS_OUTPUT.PUT_LINE('Hello');
DBMS_OUTPUT.PUT_LINE(' and Goodbye');
        Mark for Review
(1) Points
        The Declaration section is missing
        The Exception section is missing
        There is nothing wrong with the block, it will work fine.
        The END; statement is missing (*)
n a PL/SQL block, which of the following should not be followed by a semicolon?
Mark for Review
(1) Points
        DECLARE (*)
        END
```

```
All SQL statements
        All PL/SQL statements
Which sections of a PL/SQL block are optional? Mark for Review
(1) Points
        Declaration and Executable
        Declaration and Exception (*)
        Exception only
        Executable only
which lines of code will correctly display the message "Hello World" ? (Choose two.)
        Mark for Review
(1) Points
                         (Choose all correct answers)
        DBMS_OUTPUT('Hello world');
        DBMS_OUTPUT.PUT_LINE('Hello world'); (*)
        DBMS_OUTPUT.PUT_LINE('Hello' || 'World');
        DBMS_OUTPUT.PUT_LINE('Hello' || ' ' || 'World'); (*)
which of the following is a PL/SQL programming environment?
                                                                  Mark for Review
(1) Points
        Oracle Cdeveloper
        Java*Plus
        PL/SQL Express
        SQL*Workshop in Application Express (*)
        What can you use to change the column heading of calculated values in a SQL nt? Mark for Review
statement?
(1) Points
```

Multiplication operator

```
Column alias (*)
        Concatenation operator
        The DISTINCT keyword
        If you want to SELECT all the columns of data in a table, you use which of
the following symbols? Mark for Review
(1) Points
        &
        %
        $
        * (*)
he concatenation operator ... Mark for Review
(1) Points
        Brings columns or character strings together
        Creates a resultant column that is a character expression
        Is represented by two vertical bars ( || )
        All of the above (*)
        Which statement would display the departments in the EMPLOYEES table without ing any duplicates? Mark for Review
displaying any duplicates?
(1) Points
        SELECT ALL department_id
FROM employees;
        SELECT department_id
FROM employees;
        SELECT department_id
FROM employees
having ROWID=1;
        SELECT DISTINCT department_id
FROM employees;
                                         Page 53
```

(\*)

Which of the following statements lists each employee's employee\_id, salary, and salary plus a 20 percent bonus?

Mark for Review

(1) Points

SELECT emp\_id, salary, salary\*.2
FROM employees;

SELECT emp\_id, salary, salary\*1.2
FROM employees;

(\*)

SELECT emp\_id, salary, salary\*.8
FROM employees;

SELECT emp\_id, salary, salary\*20
FROM employees;

What SQL statement will return the ID, name, and area of all countries in the WF\_COUNTRIES table, listed in order of greatest area to least area? Mark for Review
(1) Points

SELECT country\_id, country\_name, area FROM wf\_countries
ORDER BY area DESC;

(\*)

SELECT country\_id, country\_name, area FROM wf\_countries
ORDER BY area ASC;

SELECT country\_id, country\_name, area FROM wf\_countries ORDER BY country\_name;

SELECT country\_id, country\_name, area FROM wf\_countries GROUP BY area; pr />

Which statement would select salaries that are greater than or equal to 2500 and less than or equal to 3500? Choose two correct answers. Mark for Review (1) Points

```
PLSQL feedback final exam semister 1 (Choose all correct answers)
```

WHERE salary  $\Rightarrow$  2500 AND salary  $\Leftarrow$  3500 (\*)

WHERE salary <=2500 AND salary >= 3500

WHERE salary BETWEEN 2500 AND 3500 (\*)

WHERE BETWEEN salary = 2500 AND salary = 3500

When using the LIKE operator, the "%" and "\_" symbols can be used to do a pattern-matching, wild card search. True or False? Mark for Review (1) Points

True (\*)

False

Examine the following statement:

SELECT country\_name, population, population\*.01
FROM wf\_countries;

How would you modify this statement to display "Country", "Population", and "Expected Growth" as the column headings?

Mark for Review

(1) Points

SELECT country\_name "COUNTRY", population "POPULATION", population\*.01 "EXPECTED GROWTH" FROM wf\_countries;

(\*)

SELECT country\_name COUNTRY, population POPULATION, population\*.01 EXPECTED GROWTH FROM wf\_countries;

SELECT country\_name 'COUNTRY', population 'POPULATION', population\*.01 'EXPECTED GROWTH' FROM wf\_countries;

SELECT country\_name, population, population\*.01 FROM wf\_countries
AS "COUNTRY", "POPULATION", "EXPECTED GROWTH";

The F\_FOOD\_ITEMS table contains the FOOD\_ITEM\_NUMBER and the REGULAR\_CODE columns. Which statement would display the FOOD\_ITEM\_NUMBER joined with the REGULAR\_CODE without any space in between them?

Mark for Review
Page 55

```
PLSQL feedback final exam semister 1
(1) Points
        SELECT food_item_number ' ' regular_code
FROM f_food_items;
        SELECT food_item_number UNION regular_code
FROM f_food_items;
        SELECT food_item_number || regular_code
FROM f_food_items;
(*)
        SELECT food_item_numberregularcode
FROM f_food_items;
Which of the following statements will display a sentence such as the following:
Aruba has an area of 193.
for every country in the WF_COUNTRIES table?
                                                Mark for Review
(1) Points
        SELECT country_name || ' has an area of ' || area
FROM wf_countries;
        SELECT country_name || 'has an area of' || area
FROM wf_countries;
        SELECT country_name || ' has an area of ' || area || '.'
FROM wf_countries;
(*)
        SELECT country_name " has an area of " area "."
FROM wf_countries;
Which of the following statements will generate a sentence such as the following:
The national holiday for United Arab Emirates is Independence Day. for every country in the WF_COUNTRIES table?
        Mark for Review
(1) Points
SELECT 'The national holiday for '|| country_name || ' is ' || national_holiday_name
FROM wf_countries;
```

```
PLSQL feedback final exam semister 1
SELECT "The national holiday for "|| country_name || " is " ||
national_holiday_name || '
FROM wf_countries;
         SELECT 'The national holiday for '|| country_name || ' is ' ||
national_holiday_name || '.
FROM wf_countries;
(*)
SELECT 'The national holiday for || country_name || is || national_holiday_name || .'
FROM wf_countries;
Which of the following statements diplays the population of the Republic of Benin (country_id 229) after a 3 percent growth in its population? Mark for Review
(1) Points
SELECT country_name, population*.03 FROM wf_countries
WHERE country_id=229;
         SELECT country_name, population*1.03
FROM wf_countries
WHERE country_id=229;
(*)
         SELECT country_name, population*30
FROM wf_countries
WHERE country_id=229;
         SELECT country_name, population+population*.3
FROM wf_countries
WHERE country_id=229;
         which of the following is not a number function? Mark for Review
(1) Points
         TO_DATE (*)
         ROUND
         MOD
         TRUNC
         The following SQL statement will display the value: 456. True or False?
                                             Page 57
```

```
SELECT TRUNC(ROUND(456.98))
FROM dual;
        Mark for Review
(1) Points
        True
        False (*)
Which statement returns a user password combining the ID of an employee and the
first 4 characters of their last name? Mark for Review
(1) Points
        SELECT CONCAT (employee_id, SUBSTR(last_name,4,1))
AS "User Passwords"
FROM employees;
        SELECT CONCAT (employee_id, INSTR(last_name,4,1))
AS "User Passwords'
FROM employees;
SELECT CONCAT (employee_id, INSTR(last_name,1,4))
AS "User_Passwords"
FROM employees;
        SELECT CONCAT (employee_id, SUBSTR(last_name,1,4))
AS "User Passwords" FROM employees;
(*)
Which query would return a whole number if today's date is 26-MAY-04? Mark for
Review
(1) Points
        SELECT TRUNC(MONTHS_BETWEEN(SYSDATE, '19-MAR-79') /12)
AS YEARS
FROM DUAL;
(*)
        SELECT TRUNC(YEARS_BETWEEN(SYSDATE, '19-MAR-79') /12)
AS YEARS
FROM DUAL;
```

```
PLSQL feedback final exam semister 1 SELECT MONTHS_BETWEEN(SYSDATE, '19-MAR-79') /12
AS YEARS
FROM DUAL;
        None of the above
Which function compares two expressions?
                                                 Mark for Review
(1) Points
        NVL
        NULLIF (*)
        NVL2
        NULL
        Assume that today is December 31, 2007. What would be the output of the
following statement?
SELECT TO_CHAR(SYSDATE, 'DD/MM/Y') FROM DUAL;
        Mark for Review
(1) Points
        12/31/7
        31-12-07
        31/12/2007
        31/12/7 (*)
Assume that today is January 10, 2008. What would be the output of the following
statement?
SELECT TO_CHAR(SYSDATE, 'ddth "of" Month, YYYY') FROM DUAL;
        Mark for Review
(1) Points
        10th of January, 2008 (*)
        10 January, 2008
        10-January-2008
        January 10th, 2008
```

```
PLSQL feedback final exam semister 1
What is returned by the following statement?
SELECT_CONCAT('Today is','Thursday!') FROM DUAL; Mark
                                                               Mark for Review
(1) Points
        TodayisThursday!
        Today isThursday! (*)
         today is thursday!
        Today is Thursday!
        what does the following SQL SELECT statement return?
SELECT UPPER( SUBSTR('Database Programming', INSTR('Database Programming', 'P'), 20))
FROM dual;
        Mark for Review
(1) Points
         Programming
         PROGRAMMING (*)
         Database
        DATABASE
        What function would you use to return the highest date in a month?
                                                                                          Mark
for Review
(1) Points
         FINAL_DAY
         END_DAY
         HIGHEST_DAY
        LAST_DAY (*)
Which SQL statement will display each country's name with the first letter (only) of
each word in uppercase?
                                   Mark for Review
(1) Points
        SELECT UPPER(country_name)
FROM wf_countries;
         SELECT lower(country_name)
FROM wf_countries;
                                           Page 60
```

```
SELECT INITCAP(country_name)
FROM wf_countries;
(*)
         SELECT country_name
FROM wf_countries
ORDER BY INITCAP(country_name);
         NULL means the same thing as a space or 0 (zero). True or False?
                                                                                              Mark
for Review
(1) Points
         True
         False (*)
Constants must be initialized. True or False? Mark for Review
(1) Points
         True (*)
         False
After they are declared, variables can be used only once in an application. True or False? Mark for Review
(1) Points
         True
         False (*)
Examine the following variable declarations: DECLARE v_number NUMBER := 10; v_result NUMBER; Which of the following correctly assigns the value 50 to V_RESULT?
                                                                                    Mark for
Review
(1) Points
         v_result := v_number * 5;
         v_result := 100 / 2;
         v_result := ROUND(49.77);
         All of the above. (*)
         Evaluate the following declaration. Determine whether or not it is legal.
DECLARE
```

```
PLSQL feedback final exam semister 1
    name, dept VARCHAR2(14);
         Mark for Review
(1) Points
         legal
         illegal (*)
         Evaluate the following declaration. Determine whether or not it is legal.
DECLARE
    test NUMBER(5);
                           Mark for Review
(1) Points
         legal (*)
         illegal
         Which of the following are required when declaring a variable? (Choose two.)
         Mark for Review
(1) Points
                           (Choose all correct answers)
         Identifier name (*)
         CONSTANT
         Data type (*)
         NOT NULL
         A function called FORMAT_TODAYS_DATE accepts no parameters and returns
today's date in the format: Month DD, YYYY
The following anonymous block invokes the function:
DECLARE v_today DATE; BEGIN -- invoke the function here
Which of the following statements correctly assigns the date variable v_today to the value returned by the format_todays_date function?
         Mark for Review
(1) Points
         format_todays_date := v_today('Month DD, YYYY');
         v_today := format_todays_date ('Month DD, YYYY');
         v_today := format_todays_date(v_today);
```

```
PLSQL feedback final exam semister 1
       v_today := TO_DATE(format_todays_date, 'Month DD, YYYY'); (*)
The name of a variable is an example of an identifier. True or False?
                                                                       Mark for
Review
(1) Points
       True (*)
        False
       which of the following is a valid naming convention for an identifier?
(Choose two.)
               Mark for Review
(1) Points
                        (Choose all correct answers)
        Can include letters or numbers (*)
       Cannot contain a reserved word (*)
        Can be over 30 characters
       Can start with a number or special character
Which of the following are lexical units? (Choose two.)

Mark for Review
(1) Points
                        (Choose all correct answers)
       Data types
        PL/SQL blocks
        Identifiers (*)
       Literals (*)
       What characters must enclose non-numeric literal values? Mark for
Review
(1) Points
        Double quotes: " "
       Parentheses: ()
        Single quotes: ' ' (*)
What is a lexical unit?
                               Mark for Review
                                      Page 63
```

```
PLSQL feedback final exam semister 1
(1) Points
         A data type for a column
         A building block of a PL/SQL block (*)
         A type of variable
Which of the following symbols can be used to enclose a comment in PL/SQL? for Review (1) Points
                                                                                         Mark
         ? ?
         *//*
         :: ::
         /* */ (*)
what are the data types of the variables in the following declaration?
DECLARE
fname VARCHAR2(20);
fname VARCHAR2(15) DEFAULT 'fernandez';
        Mark for Review
(1) Points
         Scalar (*)
         Composite
         LOB
A Scalar data type holds a \_\_\_ value. Mark for Review (1) Points
         Multi
         Large
         Single (*)
         Which of the following are scalar data types? (Choose three.) Mark for
Review
```

```
PLSQL feedback final exam semister 1
(1) Points
                          (Choose all correct answers)
        Array
        Character (*)
        Table
         Date (*)
         Boolean (*)
        Which of the following is a composite data type? Mark for Review
(1) Points
        CLOB
        VARCHAR2
         RECORD (*)
        DATE
        which of the following are PL/SQL data types? (Choose three.) Mark for
Review
(1) Points
                          (Choose all correct answers)
        Large Objects (LOB) (*)
        Lexical
         Scalar (*)
         Delimiter
        Composite (*)
datatype specifies and restricts the possible data values that can be assigned to a variable. True or False? Mark for Review
(1) Points
        True (*)
```

False

If you use the %TYPE attribute, you can avoid hard-coding the column name. True or False? Mark for Review (1) Points

True

False (\*)

Which of the following is NOT a character data type? Mark for Review (1) Points

VARCHAR2

BOOLEAN (\*)

CHAR

LONG

When declared using %TYPE, a variable will inherit \_\_\_\_ from the column on which it is based. Mark for Review (1) Points

The name of the column

The value of the column

The data type and size of the column (\*)

Code is easier to read if you declare one identifier per line. True or False? Mark for Review
(1) Points

True (\*)

False

Which of the following is NOT a good guideline for declaring variables? Mark for Review (1) Points

Declare one identifier per line

Use column names as identifiers (\*)

```
PLSQL feedback final exam semister 1
Use NOT NULL when the variable must have a value
```

```
Which of the following variable declarations does NOT use a number data
        Mark for Review
type?
(1) Points
        v_count PLS_INTEGER := 0;
        v_median_age NUMBER(6,2);
        v_students LONG; (*)
        v_count BINARY_INTEGER;
        what kind of join is used in the following example?
SELECT e.employee_id, e.last_name, j.grade_level
FROM employees e, job_grades j
WHERE e.salary BETWEEN j.lowest_sal and j.highest_sal;
        Mark for Review
(1) Points
        Simple join
        Equijoin
        Nonequijoin (*)
        Outer join
What does the following statement return?
SELECT e.last_name, d.department_id, d.department_name
FROM employees e, departments d
WHERE e.department_id(+) = d.department_id
ORDER BY e.department_id;
        Mark for Review
(1) Points
        Returns all departments, even if there are no employees in the department.
(*)
        Returns all employees, even if they have not been assigned to a department.
        Returns only those departments that contain at least one employee
        Returns all possible combinations of employees and departments.
A nonequijoin combines tables that have one or more exact matching columns. True or
```

```
PLSQL feedback final exam semister 1
False? Mark for Review
(1) Points
          True
          False (*)
          Table aliases can be used to shorten the syntax in join statements. True or
False? Mark for Review
(1) Points
          True (*)
          False
What type of join returns rows for one table even when there are no matching rows in the other table? Mark for Review (1) Points
          Simple join
          Equijoin
          Nonequijoin
          Outer join (*)
If table A has 20 rows and table B has 10 rows, how many rows will be returned if you perform a Cartesian product on those two tables?

Mark 1
                                                                                         Mark for
Review (1) Points
          20
          10
          200 (*)
          120
          will the following statement execute correctly?
SELECT department_id, department_name, last_name
FROM employees e, departments d
WHERE e.department_id = d.department_id;
          Mark for Review
(1) Points
          Yes, there are no errors in this statement.
```

No, because one column has been ambiguously defined. (\*)

No, because every column must be prefixed by its table alias, for example: e.last\_name.

Yes, Oracle will resolve which department\_id column comes from which table.

When a join condition is omitted completely the result is a Cartesian product in which all combinations of rows will be displayed. True or False? Mark for Review
(1) Points

True (\*)

False
Which of the following SQL statements will display the name and a total of people with the same last name?

Mark for Review
(1) Points

SELECT last\_name, COUNT(employee\_id) FROM EMPLOYEES GROUP BY last\_name;

(\*)

SELECT employee\_id, COUNT(last\_name)
FROM EMPLOYEES
GROUP BY last\_name;

SELECT last\_name, DISTINCT COUNT(employee\_id) FROM EMPLOYEES GROUP BY last\_name;

SELECT employee\_id, DISTINCT(last\_name) FROM EMPLOYEES GROUP BY last\_name;

Single row subqueries may NOT include which of these operators? Mark for Review (1) Points

ALL (\*)

=

<>

>

When using a subquery, the =ANY and IN operators are logically identical; they will always give the same result as each other. True or False?

Mark for Review
(1) Points

True (\*)

False

The following EMPLOYEE\_ID, SALARY, and COMMISSION\_PCT data in the EMPLOYEES table for six employees.

DATA: 143, 2600, null 144, 2500, null 149, 10500, .2 174, 11000, .3 176, 8600, .2 178, 7000, .15

What is the result of the following statement:

0.1416

0.2125 (\*)

The statement will fail because you cannot use more than one group function in a single statement.

0.2521

What would the following SQL statement return?
SELECT MAX(hire\_date) FROM employees; Mark for Review
(1) Points

The hire date of the longest serving employee.

The hire date of the newest (most recently hired) employee. (\*)

The hire dates of all employees in ascending order.

The hire dates of all employees.

Read the following SELECT statement. Choose the column or columns that MUST be included in the GROUP BY clause.

SELECT region\_id, COUNT(country\_id)
FROM wf\_countries
GROUP BY ?????

Mark for Review

(1) Points

region\_id, COUNT(country\_id)

region\_id,country\_id

country\_id

region\_id (\*)

Group functions cannot be used in subqueries because they contain too many rows. True or False? Mark for Review (1) Points

True

False (\*)

What will be returned when the following statement is executed?

SELECT last\_name

FROM employees

WHERE salary > ALL

(SELECT salary FROM employees

WHERE job\_id = 'IT\_PROG');

Mark for Review

(1) Points

The names of all IT Programmers.

The names of employees who earn more than every IT Programmer. (\*)

The names of employees who earn more than at least one IT Programmer.

The names of employees who earn more than half of the IT Programmers.

Which of the following statements about implicit conversions is NOT true? Mark for Review (1) Points

Code containing implicit conversions typically runs faster than code Page 71

```
containing explicit conversions. (*)
        Code containing implicit conversions may not work in the future if Oracle
changes the conversion rules.
        Code containing implicit conversions is harder to read and understand.
                                 PL/SQL statements must be written on a single line.
Mark for Review
(1) Points
        True
        False (*)
Which of the following are valid PL/SQL operators? (Choose three.) Mark for
Review
(1) Points
                         (Choose all correct answers)
        Concatenation (*)
        Exception
        Exponential (*)
        Arithmetic (*)
Which of the following data type conversions can be done implicitly? (Choose two.) Mark for Review
(1) Points
                         (Choose all correct answers)
        DATE to NUMBER
        NUMBER to VARCHAR2 (*)
        NUMBER to PLS_INTEGER (*
The LENGTH and ROUND functions can be used in PL/SQL statements. True or False?
Mark for Review
(1) Points
        True (*)
        False
```

```
PLSQL feedback final exam semister 1
```

Examine the following code: DECLARE x VARCHAR2(20); BEGIN x := 5 + 4 \* 5; DBMS\_OUTPUT.PUT\_LINE(x); END; What value of x will be displayed? Review (1) Points 45 29 25 (\*) 14 What will happen when the following code is executed? DECLARE v\_new\_date DATE; **BEGIN** v\_new\_date := 'Today'; DBMS\_OUTPUT.PUT\_LINE(v\_new\_date); END; Mark for Review (1) Points The block will execute and display today's date. The block will execute and display the word "Today". The block will fail because the character value "Today" cannot be implicitly converted to a date. (\*) Incorrect. Refer to Section 2. Incorrect Which explicit function is used to convert a character into a number? Mark for Review (1) Points TO\_DATE TO\_NUMBER (\*)

TO\_CHAR

PL/SQL can implicitly convert a CHAR to a NUMBER, provided the CHAR contains a numeric value, for example '123'. True or False? Mark for Review (1) Points

True (\*)

False The DECODE and MAX functions can be used in PL/SQL statements. True or False? Mark for Review (1) Points True False (\*) Using implicit conversions is good programming practice. Mark for Review (1) Points True False (\*) Examine the following block. What should be coded at Line A? **DECLARE**  $v_{char} VARCHAR2(8) := '24/09/07';$ v\_date DATE; **BEGIN** v\_date := ..... Line A END; Mark for Review (1) Points v\_date := FROM\_CHAR(v\_char, 'dd/mm/yy'); v\_date := TO\_DATE(v\_char, 'dd/mm/yy'); (\*) v\_date := v\_char; When PL/SQL converts data automatically from one data type to another, it is called conversion. Mark for Review (1) Points Explicit Implicit (\*) TO\_CHAR The TO\_CHAR function is used for explicit data type conversions. True or False?

Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
        True (*)
         False
Which of the following is correct? Mark for Review
(1) Points
        v_family_name = SMITH;
        V_FAMILY_NAME = SMITH;
        v_family_name := SMITH;
        v_family_name := 'SMITH'; (*)
         Using implicit conversions is good programming practice.
                                                                             Mark for
Review
(1) Points
        True
        False (*)
Examine the following code: DECLARE x VARCHAR2(20); BEGIN x:=5+4*5; DBMS_OUTPUT.PUT_LINE(x); END; What value of x will be displayed? Mark for
Review
(1) Points
         45
         29
        25 (*)
         14
        The DECODE and MAX functions can be used in PL/SQL statements. True or
False? Mark for Review
(1) Points
        True
        False (*)
        Which of the following are valid PL/SQL operators? (Choose three.)
                                                                                        Mark
for Review
```

Page 75

```
PLSQL feedback final exam semister 1
(1) Points
                         (Choose all correct answers)
        Concatenation (*)
        Exception
        Exponential (*)
        Arithmetic (*)
        Which of the following statements about implicit conversions is NOT true?
Mark for Review
(1) Points
Code containing implicit conversions typically runs faster than code containing explicit conversions. (*)
        Code containing implicit conversions may not work in the future if Oracle
changes the conversion rules.
        Code containing implicit conversions is harder to read and understand.
Which explicit function is used to convert a character into a number?
                                                                            Mark for
Review
(1) Points
        TO_DATE
        TO_NUMBER (*)
        TO_CHAR
Examine the following block. What should be coded at Line A?
v_{char} VARCHAR2(8) := '24/09/07';
v_date DATE;
BEGIN
v_date := ..... Line A
END;
        Mark for Review
(1) Points
        v_date := FROM_CHAR(v_char, 'dd/mm/yy');
        v_date := TO_DATE(v_char, 'dd/mm/yy'); (*)
        v_date := v_char;
```

Page 76

The TO\_CHAR function is used for explicit data type conversions. True or False? Mark for Review (1) Points

True (\*)

False

Incorrect Incorrect. R

The LENGTH and ROUND functions can be used in PL/SQL statements. True or False? Mark for Review

(1) Points

True (\*)

False

Incorrect. Refer to Section

PL/SQL statements must be written on a single line. Mark for Review (1) Points

True

False (\*

Which of the following data type conversions can be done implicitly? (Choose two.) Mark for Review (1) Points

(Choose all correct answers)

DATE to NUMBER

NUMBER to VARCHAR2 (\*)

NUMBER to PLS\_INTEGER (\*)

When PL/SQL converts data automatically from one data type to another, it is called \_\_\_\_\_ conversion. Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
        Explicit
        Implicit (*)
        TO_CHAR
What will happen when the following code is executed?
DECLARE v_new_date DATE;
v_new_date := 'Today';
DBMS_OUTPUT.PUT_LINE(v_new_date);
        Mark for Review
(1) Points
        The block will execute and display today's date.
        The block will execute and display the word "Today".
        The block will fail because the character value "Today" cannot be implicitly
converted to a date. (*)
PL/SQL can implicitly convert a CHAR to a NUMBER, provided the CHAR contains a numeric value, for example '123'. True or False? M
for Review (1) Points
        True (*)
        False
                                      Mark for Review
which of the following is correct?
(1) Points
        v_family_name = SMITH;
        V_FAMILY_NAME = SMITH;
        v_family_name := SMITH;
        v_family_name := 'SMITH'; (*)
        What happens when an exception occurs in the executable section of a PL/SQL
block? Mark for Review
(1) Points
```

Oracle keeps trying to re-execute the statement which caused the exception.

PLSQL feedback final exam semister 1
The remaining statements in the executable section are not executed.
Instead, Oracle looks for an EXCEPTION section in the block. (\*)

The remaining statements in the executable section of the block are executed.

The exception is always propagated to the calling environment.

An inner block is nested within an outer block. An exception occurs within the inner block, but the inner block does not have an EXCEPTION section. What happens? Mark for Review (1) Points

The exception is propagated to the outer block and the remaining executable statements in the outer block are skipped. (\*)

The exception is propagated to the outer block and the remaining executable statements in the outer block are executed.

Oracle automatically tries to re-execute the inner block.

The outer block is bypassed and the exception is always propagated to the calling environment.

What is wrong with this code?

**DECLARE** 

v\_a NUMBER;

**BEGIN** 

 $v_a := 27;$ 

<<inner\_block>>

**BEGIN** 

v\_a := 15;

END;

Mark for Review

(1) Points

The outer block has no label.

Variable  $v_a$  is out of scope within the inner block and therefore cannot be referenced.

The inner block has no END; statement. (\*)

Nothing is wrong, the code will execute successfully.

Examine the following code. At Line A, we want to assign a value of 25 to the outer block's variable (V1). What must we do?

**DECLARE** 

v\_myvar NUMBER; -- This is V1

BEGTN

```
PLSQL feedback final exam semister 1
    DECLARE
       v_myvar NUMBER := 8;
       BEGÍN
         -- Line A
       END;
END;
        Mark for Review
(1) Points
At Line A, code: v_myvar := 25;
        Label both blocks and at line A, code:
v_myvar := 25;
        It cannot be done because the outer block's v_myvar is out of scope at Line
Α.
        Label the outer block and (at Line A) dot-prefix v_myvar with the block
label.
(*)
        It cannot be done because the outer block's v_myvar is in scope but not
visible at Line A.
Examine the following code. At Line A, we want to assign a value of 25 to the outer
block's variable (V1). What must we do?
DECLARE
    v_myvar NUMBER; -- This is V1
BEGIN
    DECLARE
       v_myvar NUMBER := 8;
       BEGIN
          -- Line A
END;
        Mark for Review
(1) Points
        At Line A, code:
v_myvar := 25;
        Label both blocks and at line A, code:
v_myvar := 25;
        It cannot be done because the outer block's v_myvar is out of scope at Line
Α.
```

```
Label the outer block and (at Line A) dot-prefix v_myvar with the block
label.
(*)
        It cannot be done because the outer block's v_myvar is in scope but not
visible at Line A.
        Examine the following code. What is the scope of variable v_myvar?
DECLARE
    v_myvar NUMBER;
BEGIN
    v_myvar := 6;
    DECLARE
       v_hervar NUMBER;
    BEGIN
       v_{hervar} := 4;
    END;
END;
       Mark for Review
(1) Points
        Only the outer block
        Both the inner and the outer block (*)
        Only the inner block
        Neither block
Examine the following nested blocks. Line B causes an exception. What will be
displayed when this code is executed?
DECLARE
    var_1 NUMBER;
BEGIN
    var_1 := 4;
    DECLARE
       var_2 NUMBER;
    BEGIN
       var_2 := 'Unhappy'; -- Line B
var_1 := 8;
    END;
    var_1 := 12;
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE(var_1);
END;
        Mark for Review
(1) Points
        Unhappy
```

15 (\*)

Nothing is displayed

# PLSQL feedback final exam semister 1 What values will be displayed when the following code is executed? **DECLARE** v\_mynum NUMBER; **BEGIN** $v_mynum := 7;$ **DECLARE** v\_mynum NUMBER; **BEGIN** DBMS\_OUTPUT.PUT\_LINE(v\_mynum); $v_mynum := 3;$ DBMS\_OUTPUT.PUT\_LINE(v\_mynum); END; Mark for Review (1) Points 3,3 3,7 Null, 7 (\*) Null, 3 What is wrong with the following statement? DELETE from employees WHERE salary > (SELECT MAX(salary) FROM employees); Mark for Review (1) Points You cannot code a subquery inside a DELETE statement. You cannot use inequality operators such as "<" and ">" inside a DELETE statement. Nothing is wrong, the statement will execute correctly. (\*) Is it possible to insert more than one row at a time using an INSERT statement with a VALUES clause? Mark for Review (1) Points No, you can only create one row at a time when using the VALUES clause. (\*) Yes, you can list as many rows as you want, just remember to separate the rows with commas. No, there is no such thing as INSERT ... VALUES.

When inserting a row into a table, the VALUES clause must include a value for every

Mark for Review

column of the table. True or False?

(1) Points

True

False (\*)

What is wrong with the following statement? MERGE INTO emps e USING new\_emps ne ON (e.employee\_id = ne.employee\_id) WHEN MATCHED THEN UPDATE SET ne.salary = e.salary WHEN NOT MATCHED THEN INSERT VALUES (ne.employee\_id, ne.first\_name, ne.last\_name, .... ne.salary, ....); Mark for Review (1) Points

The UPDATE clause must include the target table name: UPDATE emps SET ....

The INSERT clause must include a column list as well as a list of column values.

The SET clause is trying to update the source table from the target table.

Nothing is wrong, the statement will execute correctly.

Look at this SQL statement: MERGE INTO old\_trans ot USING new\_trans nt ON (ot.trans\_id = nt.trans\_id) ....; OLD\_TRANS is the source table and NEW\_TRANS is the target table. True or false?

Mark for Review
(1) Points

True

False (\*)

To modify an existing row in a table, you can use the \_\_\_\_\_ statement. Mark for Review
(1) Points

MODIFY

**INSERT** 

**ALTER** 

UPDATE (\*)

what would be the result of the following statement: DELETE employees; Mark for Review

(1) Points

Nothing, no data will be changed.

All rows in the employees table will be deleted. (\*)
Page 84

The statement will fail because it contains a syntax error.

The row with EMPOYEE\_ID=100 will be deleted.

You want to modify existing rows in a table. Which of the following are NOT needed in your SQL statement? (Choose Two) Mark for Review (1) Points

(Choose all correct answers)

A MODIFY clause (\*)

An UPDATE clause

The name of the table

The name of the column(s) you want to modify.

A new value for the column you want to modify (this can be an expression or a subquery).

A WHERE clause. (\*)

Does PL/SQL allow you to have a variable with the same name as a database column? Mark for Review (1) Points

No

Yes (\*)

What will happen when the following block is executed? DECLARE v\_last employees.last\_name%TYPE; v\_first employees.first\_name%TYPE; v\_salary employees.salary%TYPE; BEGIN SELECT first\_name, last\_name INTO v\_first, v\_last, v\_salary FROM employees WHERE employee\_id=100; END; Mark for Review (1) Points

The block will fail because the SELECT statement returns more than one row.

The block will fail because the SELECT is trying to read two columns into three PL/SQL variables. (\*)

The block will fail because V\_LAST was declared before V\_FIRST.

The block will execute successfully, and the  $V\_SALARY$  variable will be set to NULL.

PLSQL feedback final exam semister 1
When used in a PL/SQL block, which SQL statement must return exactly one row? Mark
for Review
(1) Points

**INSERT** 

**UPDATE** 

SELECT (\*)

**MERGE** 

**DELETE** 

Look at this PL/SQL block: DECLARE v\_count NUMBER; BEGIN SELECT COUNT(\*) INTO v\_count FROM employees WHERE salary > 50000; END; No employees earn more than \$50000. Which of the following statements are true? (Choose two). Mark for Review (1) Points

(Choose all correct answers)

The SELECT will return value 0 into V\_COUNT. (\*)

The SELECT will fail because it does NOT return exactly one row.

The block will fail because variable V\_SALARY was not declared.

The SELECT returns exactly one row. (\*)

The block will fail because no results are displayed to the user.

Which of the following is NOT a valid guideline for retrieving data in PL/SQL? Mark for Review
(1) Points

Terminate the SQL statement with a semicolon (;)

Do NOT use a WHERE clause in SELECT statements. (\*)

where possible, declare variables using the %TYPE attribute.

Specify the same number of variables in the INTO clause as database columns in the SELECT clause.

Incorrect. Refer to Section 3.

```
PLSQL feedback final exam semister 1
           It is good programming practice to create identifiers having the same name
as column names. True or False?
                                                      Mark for Review
(1) Points
          True
          False (*)
Which SQL statements can be used directly in a PL/SQL block? (Choose two.) Mark for Review
(1) Points
                                 (Choose all correct answers)
          GRANT EXECUTE ON ...
           SELECT * INTO ... (*)
           REVOKE SELECT ON ...
           UPDATE employees SET... (*)
          ALTER TABLE employees ...
           Which one of these SQL statements can be directly included in a PL/SQL
executable block?
                                Mark for Review
(1) Points
           IF... THEN...;
           INSERT INTO...; (*)
           SELECT * FROM DUAL;
           SHOW USER;
There are three employees in department 90. What will be displayed when the following code is executed? DECLARE v_open CHAR(3) := 'NO'; BEGIN UPDATE employees SET job_id = 'ST_CLERK' WHERE department_id = 90; IF SQL%FOUND THEN v_open := 'YES'; END_IF; DBMS_OUTPUT_PUT_LINE(v_open || ' ' || SQL%ROWCOUNT); END; Mark for
Review
(1) Points
           NO 3
           YES 1
          YES 3 (*)
```

Nothing will be displayed. The block will fail because you cannot use implicit cursor attributes directly in a call to DBMS\_OUTPUT.PUT\_LINE.

A PL/SQL block contains the following DML statement: UPDATE wf\_countries SET population = population \* 1.1 WHERE country\_id = 229; Which kind of cursor is used for this statement? Mark for Review (1) Points

An implicit cursor named "WF\_COUNTRIES".

An implicit cursor named "SQL". (\*)

An explicit cursor named "SQL".

An explicit cursor which must be declared and named by the PL/SQL programmer.

Employee\_id 999 does not exist. What will happen when the following code is
executed? DECLARE employee\_id employees.employee\_id%TYPE := 999; BEGIN UPDATE
employees SET salary = salary \* 1.1 WHERE employee\_id = employee\_id; END; Mark
for Review
(1) Points

No rows are updated but the block completes successfully.

Every employee row is updated. (\*)

An exception is raised because you cannot give a variable the same name as a table column.

An exception is raised because the UPDATE statement did not modify any rows.

You can use implicit cursor attributes such as SQL%ROWCOUNT directly inside a DML statement. For example: INSERT INTO log\_table VALUES (SYSDATE, USER, SQL%ROWCOUNT); True or False? Mark for Review (1) Points

True

False (\*)

Which of the following SQL DML commands can be used inside a PL/SQL block? Mark for Review (1) Points

INSERT and UPDATE only.

```
PLSQL feedback final exam semister 1
        UPDATE and DELETE only.
        INSERT, UPDATE and DELETE only.
        INSERT, UPDATE, DELETE and MERGE. (*)
Which of the following use an implicit cursor? Mark for Review
(1) Points
        DML statements only.
        SELECT statements only.
        DML statements and SELECT statements which return a single row. (*)
        COMMIT and ROLLBACK statements only.
        Examine the following code: BEGIN
INSERT INTO animals VALUES ('aa', 'aardvarks');
SAVEPOINT sp_1;
INSERT INTO animals VALUES ('bb', 'big birds');
SAVEPOINT sp_2;
ROLLBACK TO sp_1;
INSERT INTO animals VALUES ('cc','cool cats');
COMMIT;
END;
Which row(s) will be in the ANIMALS table after this block is executed?
                                                                                 Mark
for Review
(1) Points
        cool cats
        big birds and cool cats
        aardvaarks and cool cats (*)
        aardvaarks, big birds and cool cats
                                                         Mark for Review
How many INSERTS can you have in one transaction?
(1) Points
        one
        As many as you want until you do a COMMIT or ROLLBACK. (*)
        As many as you can execute before the database does an AUTOSAVE.
        As many as you want until a different DML statement (UPDATE, DELETE or
MERGE) is executed.
                                       Page 89
```

In a PL/SQL block, where can you code a COMMIT statement? Mark for Review (1) Points

In any section of the block: Declaration, Executable, or Exception.

Only the Executable section.

In the Executable and/or the Exception sections. (\*)

Nowhere; the COMMIT statement must be outside the block.

How many transactions are in the following block?

**BEGIN** 

INSERT INTO countries (country\_id, country\_name)
 VALUES ('XA', 'Xanadu');
INSERT INTO countries (country\_id, country\_name)
 VALUES ('NV', 'Neverland');
UPDATE countries SET country\_name='Deutchland'
 WHERE country\_id='DE';
UPDATE countries SET region\_id=1
 WHERE country\_name LIKE '%stan';
.

END;

How many transactions are shown above?

Mark for Review

(1) Points

Four; each DML is a separate transaction

 $\,$  Two; both the INSERTs are one transaction and both the UPDATEs are a second transaction.

It depends on how many rows are updated - there will be a separate transaction for each row.

One (\*)

We want to execute one of three statements depending on whether the value in  $V\_VAR$  is 10, 20 or some other value. What should be coded at Line A? IF  $V\_Var = 10$  THEN statement1; -- Line A statement2; ELSE statement3; END IF; Mark for Review (1) Points

ELSE IF  $v_var = 20$  THEN

ELSIF  $v_var = 20$ 

ELSIF  $v_var = 20$  THEN (\*)

```
IF v var = 20 THEN
What is wrong with the following trivial IF statement:
IF (v_job='President')
THEN v_salary := 10000;
Mark for Review
(1) Points
          IF and THEN must be on the same line: IF (v_job='President') THEN ...
          The condition should be coded: IF (v_job := 'President')
          END IF; is missing (*)
          ELSE is missing
You want to repeat a set of statements 100 times, incrementing a counter each time. What kind of PL/SQL control structure would you use? Mark for Review
(1) Points
          IF...THEN...ELSE
          IF...THEN...ELSIF...ELSE
          CASE...WHEN...THEN
          A loop. (*)
Look at the following (badly written) code:
age := 5; IF age<30 THEN mature := 'adult';
ELSIF age<22 THEN mature := 'teenager';
ELSIF age<13 THEN mature := 'child';</pre>
END IF;
DBMS_OUTPUT.PUT_LINE(mature);
What will be displayed when this code is executed?
          Mark for Review
(1) Points
          child.
          teenager
          adult (*)
          adultteenagerchi
```

Which one of the following is correct syntax for an IF statement? Mark for Review

(1) Points

IF condition THEN DO statement1; statement2; END IF;

IF condition THEN statement1; statement2; END IF; (\*)

IF condition THEN statement1; statement2; ENDIF;

IF condition THEN statement1; AND statement2; END IF;

What will be displayed when this block is executed? DECLARE v\_bool1 BOOLEAN := NULL; v\_bool2 BOOLEAN := NULL; v\_char VARCHAR(10) := 'Start'; BEGIN IF (v\_bool1 = v\_bool2) THEN v\_char:='Equal'; ELSE v\_char:='Not equal'; END IF; DBMS\_OUTPUT.PUT\_LINE(v\_char); END; Mark for Review (1) Points

Equal

Not equal (\*)

Start

Nothing will be displayed. The block will fail because you cannot compare two null values.

Which of the following statements are true about PL/SQL conditional control structures such as IF ..., CASE ... and loops?

Mark for Review
(1) Points

They allow the programmer to use logical tests to determine which statements are executed and which are not.

They allow a set of statements to be executed repeatedly (i.e. more than once).

They determine a course of action based on conditions.

All of the above. (\*)

What will be displayed when this block is executed? DECLARE v\_bool1 BOOLEAN := TRUE; v\_bool2 BOOLEAN; v\_char VARCHAR(4) := 'up'; BEGIN IF (v\_bool1 AND v\_bool2) THEN v\_char:='down'; ELSE v\_char:='left'; END IF; DBMS\_OUTPUT.PUT\_LINE(v\_char); END; Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
        up
        down
        left (*)
        nu11
        Look at the following code:
DECLARE
x BOOLEAN := FALSE;
y BOOLEAN := FALSE;
z BOOLEAN ;
BEGIN
z := (x OR NOT y);
-- Line A
END;
What is the value of Z at Line A?
       Mark for Review
(1) Points
       True (*)
        False
        NULL
        An error will occur because you cannot combine two Boolean variables using
"NOT".
Examine the following code:
DECLARE
v_score NUMBER(3);
v_grade CHAR(1);
BEGIN
v_grade := CASE v_score
-- Line A
The CASE expression must convert a numeric score to a letter grade: 90 -> A, 80 ->
B, 70 -> C and so on. What should be coded at Line A?
       Mark for Review
(1) Points
       WHEN 90 THEN grade := 'A'
```

Page 93

WHEN 90 THEN v\_grade := 'A';

```
PLSQL feedback final exam semister 1
         WHEN 90 THEN 'A' (*)
         WHEN 90 THEN 'A';
what will be displayed when the following block is executed?
DECLARE
v_age1 NUMBER(3);
v_age2 NUMBER(3);
v_message VARCHAR2(20);
BEGIN
CASE
WHEN v_age1 = v_age2 THEN v_message := 'Equal';
WHEN v_age1 <> v_age2 THEN v_message := 'Unequal';
ELSE v_message := 'Undefined';
END CASE;
DBMS_OUTPUT.PUT_LINE(v_message);
END;
         Mark for Review
(1) Points
         Equal
         Undefined (*)
         Unequal
         Nothing will be displayed because V_MESSAGE is set to NULL.
                            Incorrect. Refer to Section 4.
Incorrect
         How must you end a CASE expression?
                                                        Mark for Review
(1) Points
         END; (*)
         ENDIF;
         END CASE;
         ENDCASE;
         Examine the following code:
```

DECLARE

**BEGIN** 

v\_score NUMBER(3); v\_grade CHAR(1);

```
PLSQL feedback final exam semister 1
CASE v_score
-- Line A
. . . .
The CASE statement must convert a numeric score to a letter grade: 90 -> A, 80 -> B,
70 -> C and so on.
What should be coded at Line A?
         Mark for Review
(1) Points
         WHEN 90 THEN v_grade := 'A'
         WHEN 90 THEN v_grade := 'A'; (*)
         WHEN 90 THEN 'A'
         WHEN 90 THEN 'A';
What will be displayed when the following block is executed?
DECLARE
v_age NUMBER(3);
v_gender VARCHAR2(6) := 'Female';
v_status VARCHAR2(20);
BEGIN
CASE
WHEN v_age >= 18 AND v_gender = 'Male' THEN v_status := 'Adult Male';
WHEN v_age >= 18 AND v_gender = 'Female' THEN v_status := 'Adult Female';
WHEN v_age < 18 AND v_gender = 'Male' THEN v_status := 'Junior Male';
WHEN v_age < 18 AND v_gender = 'Female' THEN v_status := 'Junior Female';
ELSE v_status := 'Other Value';
END CASE;
DBMS_OUTPUT.PUT_LINE(v_status);
END;
         Mark for Review
(1) Points
         Adult Male
         Junior Female
         Other Value (*)
         Nothing will be displayed because V_STATUS is set to NULL.
Examine the following code:
DECLARE
v_a BOOLEAN;
v_b BOOLEAN := FALSE;
```

Page 95

```
PLSQL feedback final exam semister 1
v_c BOOLEAN ;
BEGIN
v_c := (v_a \text{ AND } v_b);
-- Line A
END;
What is the value of V_C at Line A?
        Mark for Review
(1) Points
        True
        False (*)
        NULL
        Undefined
                                         Mark for Review
How must you end a CASE statement?
(1) Points
        END;
        END CASE; (*)
        END IF;
        ENDCASE;
Which kind of loop is this?
i := 10;
LOOP
    i := i + 1;
EXIT WHEN i > 30;
END LOOP;
        Mark for Review
(1) Points
        A FOR loop.
        A WHILE loop.
        A basic loop. (*)
        An infinite loop.
```

A nested loop.

What are the three kinds of loops in PL/SQL? Mark for Review (1) Points

ascending, descending, unordered

infinite, finite, recursive

IF, CASE, LOOP

FOR, WHILE, basic (\*

How many EXIT statements can be coded inside a basic loop? Mark for Review (1) Points

None.

One only.

Two.

As many as you need, there is no limit. (\*)

ou want to calculate and display the multiplication table for "sevens": 7x1=7, 7x2=14, 7x3=21 and so on. Which kind of PL/SQL construct is best for this? Mark for Review (1) Points

A loop (\*)

A CASE statement

IF ... END IF;

A Boolean variable

For which one of these tasks should you use a PL/SQL loop? Mark for Review (1) Points

Updating the salary of one employee.

Executing the same set of statements repeatedly until a condition becomes true. (\*)

```
Deciding whether a value is within a range of numbers.
        Making a decision based on whether a condition is true or not.
what will be displayed when this block is executed?
DECLARE
v_count NUMBER := 10;
v_result NUMBER;
BEGIN
L<sub>0</sub>0P
v_count := v_count - 1;
EXIT WHEN v_count < 5;
v_result := v_count * 2;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_result);
END;
        Mark for Review
(1) Points
        8
        10 (*)
        12
        NULL
Examine the following code:
DECLARE
v_count NUMBER := 0;
v_string VARCHAR2(20);
L00P
v_string := v_string || 'x';
IF LENGTH(v_string) > 10 THEN
EXIT;
END IF;
v_count := v_count + 1;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_count);
What will be displayed when this block is executed?
        Mark for Review
(1) Points
        9
        10 (*)
```

11

#### **XXXXXXXX**

```
Look at this code:
DECLARE
v_bool BOOLEAN := TRUE;
v_date DATE;
BEGIN
L00P
EXIT WHEN v_bool;
SELECT SYSDATE INTO v_date FROM dual;
END LOOP;
END;
How many times will the SELECT statement execute?
        Mark for Review
(1) Points
        Once.
        Twice.
        Never (the SELECT will not execute at all) (*)
        An infinite number of times because the EXIT condition will never be true
You should use a WHILE loop when the number of iterations of the loop is known in
advance. True or False?
                                Mark for Review
(1) Points
        True
        False (*)
Look at the following block:
DECLARE
v_date DATE := SYSDATE;
BEGIN
WHILE v_date < LAST_DAY(v_date) LOOP
v_date := v_date + 1;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_date);
If today's date is 17th April 2007, what will be displayed when this block executes?
        Mark for Review
(1) Points
        01-MAY-07
        31-DEC-07
```

4/30/2007 (\*)

4/17/2007

In a FOR loop, an explicitly declared counter is automatically incremented by 1 for each iteration of the loop. True or False? Mark for Review (1) Points

True

False (\*)

Which statement best describes when a FOR loop should be used? Mark for Review (1) Points

when an EXIT WHEN statement must be coded.

When an implicitly declared counter must increase by  ${\bf 1}$  in each iteration of the loop. (\*)

When we want to exit from the loop when a Boolean variable becomes FALSE.

when the statements inside the loop must execute at least once.

You want a loop that counts backwards from 10 through 1. How do you code that? Mark for Review (1) Points

FOR i IN 10 .. 1 LOOP

FOR i IN 1 .. 10 BY -1 LOOP

FOR i IN REVERSE 1 .. 10 LOOP (\*)

FOR i IN REVERSE 10 .. 1 LOOP

Look at this code fragment:

FOR i IN 1 .. 3 LOOP
i := 4;
DBMS\_OUTPUT\_PUT\_LINE('The counter is: ' || i);
END LOOP;

How many lines of output will be displayed?

Mark for Review

(1) Points

One

```
PLSQL feedback final exam semister 1
         Three
         Four
         The block will fail because you cannot change the value of i inside the
loop. (*)
In a WHILE loop, the controlling condition is checked at the start of each iteration. True or False? Mark for Review
(1) Points
         True (*)
         False
         Look at the following code fragment:
i := 2;
WHILE i < 3 LOOP
i := 4;
DBMS_OUTPUT.PUT_LINE('The counter is: ' || i);
END LOOP;
How many lines of output will be displayed?
        Mark for Review
(1) Points
         No lines
         One line (*)
         Two lines
         The block will fail because you cannot use DBMS_OUTPUT.PUT_LINE inside a
loop.
Look at the following code:
DECLARE
v_blue NUMBER(3) := 0;
v_red NUMBER(3) := 0;
BEGIN
<<blue>> LOOP
v_blue := v_blue + 1;
EXIT_WHEN v_blue > 10;
```

<<red>> LOOP

-- Line A

v\_red := v\_red + 1; EXIT WHEN v\_red > 10;

```
PLSQL feedback final exam semister 1
END LOOP red;
END LOOP blue;
END;
What should you code at Line A to exit from the outer loop?

Mark for Review
(1) Points
        EXIT;
        EXIT red;
        EXIT <<blue>>;
        EXIT blue; (*)
What will be displayed when the following block is executed?:
DECLARE
x \text{ NUMBER}(6) := 0 ;
BEGIN
FOR i IN 1..10 LOOP
FOR j IN 1..5 LOOP
x := x+1;
END LOOP;
END LOOP:
DBMS_OUTPUT.PUT_LINE(x);
END;
        Mark for Review
(1) Points
        5
        10
        15
        50 (*)
Which one of these statements about using nested loops is true?
                                                                            Mark for
Review
(1) Points
        All the loops must be labelled
        The outer loop must be labelled, but the inner loop need not be labelled
        The outer loop must be labelled if you want to exit the outer loop from
within the inner loop (*)
```

```
PLSQL feedback final exam semister 1
        Both loops can have the same label
When the following code is executed, how many lines of output will be displayed?
FOR i IN 1..5 LOOP
FOR j IN 1..8 LOOP
DBMS_OUTPUT.PUT_LINE(i || ',' || j);
END LOOP;
DBMS_OUTPUT.PUT_LINE(i);
END LOOP;
END;
        Mark for Review
(1) Points
        80
        45 (*)
        14
        41
You cannot OPEN or CLOSE an implicit cursor. Why not? Mark for Review
(1) Points
        Because an implicit cursor is always called SQL.
        Because an implicit cursor is OPENed and CLOSEd automatically by Oracle. (*)
When must you declare and use an explicit cursor?
                                                        Mark for Review
(1) Points
        You need to UPDATE more than one row in a table.
        You want to use a MERGE statement.
        You need to SELECT more than one row from a table. (*)
        You want to be able to ROLLBACK a transaction if needed
One (and only one) employee has LAST_NAME = 'Grant'. You need to code:
SELECT ... FROM employees WHERE last_name = 'Grant';
Which type of cursor should you use, and why?
        Mark for Review
(1) Points
```

PLSQL feedback final exam semister 1 An implicit cursor, because there is only one 'Grant'.

An implicit cursor, because SELECT is a SQL statement and implicit cursors are always called "SQL".

An explicit cursor, because there could be more than one 'Grant' in the future. (\*)

An explicit cursor, because you can use an implicit cursor only for DML statements.

There are 8 countries in REGION\_ID 13 (Central America). What will happen when the following code is executed?

DECLARE
CURSOR country\_curs IS SELECT country\_name FROM wf\_countries
WHERE region\_id = 13;
v\_country\_name wf\_countries.country\_name%TYPE;
BEGIN
OPEN country\_curs;
WHILE country\_curs%FOUND
LOOP
FETCH country\_curs INTO v\_country\_name;
DBMS\_OUTPUT.PUT\_LINE(v\_country\_name);
END LOOP;
CLOSE country\_curs;
END;

Mark for Review

#### (1) Points

Eight rows will be fetched and displayed successfully.

The last seven rows will be fetched and displayed.

The block will execute, but no rows will be displayed. (\*)

The block will fail because you can not use a WHILE loop with an explicit cursor.

None of the above.

Examine the following code:

```
DECLARE
CURSOR dept_curs IS SELECT department_name FROM departments;
v_dept_name departments.department_name%TYPE;
BEGIN
OPEN dept_curs;
LOOP
FETCH dept_curs INTO v_dept_name;
DBMS_OUTPUT.PUT_LINE(v_dept_name);
EXIT WHEN dept_curs%NOTFOUND;
```

```
PLSQL feedback final exam semister 1
END LOOP;
CLOSE dept_curs;
END;
There are 10 rows in the DEPARTMENTS table. What will happen when this code is
executed?
        Mark for Review
(1) Points
        10 rows will be displayed.
        10 rows will be displayed, followed by a row of NULL values.
        The last row will be displayed twice. (*)
        A NO_DATA_FOUND exception will be raised.
        The loop will execute for ever; the same 10 rows will be displayed over and
over again.
Which one of the following statements is NOT true?
                                                        Mark for Review
(1) Points
        You can use ORDER BY when declaring an explicit cursor.
        You can not use an INTO clause when declaring an explicit cursor.
        An explicit cursor can select from only one table. No joins are allowed. (*)
        An explicit cursor must be DECLAREd before it can be OPENed.
what is wrong with the following code?
DECLARE
CURSOR emp_curs IS SELECT last_name, salary FROM employees;
v_last_name employees_last_name%TYPE;
v_salary employees.salary%TYPE;
BEGIN
FETCH emp_curs INTO v_last_name, v_salary;
OPEN emp_curs;
FETCH emp_curs INTO v_last_name, v_salary;
CLOSE emp_curs;
END;
        Mark for Review
(1) Points
```

. .

When FETCHing more than one row, you MUST use a loop.

PLSQL feedback final exam semister 1 The cursor declaration does not include a WHERE condition.

The cursor declaration does not include an INTO clause.

The first row is FETCHed before the cursor is OPENed. (\*)

You have declared a cursor EMP\_CURSOR to select many rows from the EMPLOYEES table. The following five statements will be in the executable section:

- A. FETCH emp\_cursor INTO v\_empno,v\_last\_name;
- B. OPEN emp\_cursor;
- C. END LOOP;
- D. CLOSE emp\_cursor;
- E. LOOP

In which order should you code these statements?

Mark for Review

(1) Points

B, E, A, C, D (\*)

E, B, A, C, D

B, E, A, D, C

B, A, E, D, C

You execute the following code:

DECLARE
CURSOR emp\_curs IS SELECT last\_name FROM employees;
v\_last\_name employees.last\_name%TYPE;
BEGIN
OPEN emp\_curs;
LOOP -- Point A
FETCH emp\_curs INTO v\_last\_name;
EXIT WHEN emp\_curs%NOTFOUND;
DBMS\_OUTPUT.PUT\_LINE(v\_last\_name);
END LOOP;
CLOSE emp\_curs;
END;

At Point A (after you have OPENed the cursor) another user updates an employee's last\_name from 'Smith' to 'Jones' and immediately COMMITS.

When your block FETCHes this row, which value will be fetched and displayed?

Mark for Review

(1) Points

1

Smith (\*)

Jones

Smith and Jones (the row will be fetched twice)

An INVALID\_CURSOR exception will be raised when you try to FETCH the row.

Which of the following best describes the difference between implicit and explicit cursors?

Mark for Review
(1) Points

Implicit cursors are used for SELECT statements, while explicit cursors are used for DML statements.

Implicit cursor are named by the PL/SQL programmer, while explicit cursors are always named SQL.

Implicit cursors are defined automatically by Oracle, while explicit cursors must be declared by the PL/SQL programmer. (\*)

Implicit cursors store rows on disk, while explicit cursors store rows in memory.

Which one of the following explicit cursor declarations is NOT valid? Mark for Review (1) Points

CURSOR country\_curs IS
SELECT country\_name, region\_name
FROM wf\_countries c, wf\_world\_regions r
WHERE c.region\_id = r.region\_id;

CURSOR country\_curs IS
SELECT country\_name INTO v\_country\_name
FROM wf\_countries;

(\*)

CURSOR country\_curs IS SELECT country\_name FROM wf\_countries ORDER BY population DESC;

CURSOR country\_curs IS
SELECT country\_name
FROM wf\_countries
WHERE region\_id IN
(SELECT region\_id FROM wf\_world\_regions
Page 107

```
PLSQL feedback final exam semister 1
WHERE LOWER(region_name) LIKE '%asia%');
what is wrong with the following code?
DECLARE
CURSOR dept_curs IS SELECT department_name FROM departments;
v_dept_name departments.department_name%TYPE;
BEGIN
OPEN dept_curs;
L<sub>0</sub>0P
FETCH dept_curs INTO v_dept_name;
EXIT WHEN dept_curs%NOTFOUND;
DBMS_OUTPUT.PUT_LINE(v_dept_name);
CLOSE dept_curs;
END LOOP;
END;
        Mark for Review
(1) Points
        Nothing is wrong, all the rows will be FETCHed and displayed.
        The OPEN statement should be inside the loop.
        The EXIT WHEN ... statement should be coded outside the loop.
        The CLOSE statement should be coded after END LOOP; (*)
        The loop should be a WHILE loop, not a basic loop.
Examine the following code:
DECLARE
CURSOR country_curs IS
SELECT country_id, country_name
FROM wf_countries
ORDER BY country_name;
v_country country_curs%ROWTYPE;
BEGIN
OPEN country_curs;
FETCH country_curs INTO v_country;
EXIT WHEN country_curs%NOTFOUND;
----- Line A
END LOOP;
CLOSE country_curs;
You want to display the id and name of each FETCHed country. What would you code at
Line A?
        Mark for Review
(1) Points
```

```
PLSQL feedback final exam semister 1
        DBMS_OUTPUT.PUT_LINE(country_id || ' ' || country_name);
        DBMS_OUTPUT.PUT_LINE(v_country(country_id) || ' ' ||
v_country(country_name));
        DBMS_OUTPUT.PUT_LINE(country_curs.country_id || ' ' ||
country_curs.country_name);
        DBMS_OUTPUT.PUT_LINE(v_country.country_id || ' ' || v_country.country_name);
(*)
You can reference explicit cursor attributes directly in a SQL statement. True or
False? Mark for Review
(1) Points
        True
        False (*)
         Look at the following code:
DECLARE
CURSOR emp_cursor IS
SELECT employee_id, last_name, salary FROM employees;
v_empcurs emp_cursor%ROWTYPE;
what is the data type of V_EMPCURS?
       Mark for Review
(1) Points
        Scalar
        Record (*)
        Cursor
        Row
You have declared the following cursor:
CURSOR country_curs IS
SELECT * FROM wf_countries
ORDER BY country_name;
There are over 200 rows in the WF_COUNTRIES table, but you want to fetch and display
only the first 25 rows.
How would you exit from the FETCH loop?
        Mark for Review
                                      Page 109
```

```
PLSQL feedback final exam semister 1
(1) Points
         EXIT WHEN country_curs%FOUND(25);
         EXIT WHEN country_curs%ROWCOUNT > 25; (*)
         EXIT WHEN ROWCOUNT > 25;
         WHEN country_curs > 25 THEN EXIT; END IF;
Look at these declarations:
DECLARE
CURSOR dept_loc_cursor IS
SELECT department_id, department_name, location_name
FROM departments d, locations l
WHERE d.location_id = l.location_id;
v_dept_loc dept_loc_cursor%ROWTYPE;
How many fields does V_DEPT_LOC contain?
         Mark for Review
(1) Points
         Two, because the cursor joins two tables
         Four
         Three (*)
         None
         Which of the following explicit cursor attributes evaluates to TRUE if the
most recent FETCH returns a row?
                                            Mark for Review
(1) Points
         %ISOPEN
         %NOTFOUND
         %FOUND (*)
         %ROWCOUNT
How must you reference one field which is part of a PL/SQL record?
                                                                               Mark for
Review
(1) Points
         field_name.record_name
```

```
PLSQL feedback final exam semister 1
        record_name.field_name (*)
        record_name(field_name)
        field_name OF record_name
        It cannot be done.
You have declared a cursor as follows:
CURSOR loc_curs IS SELECT * FROM locations;
How should you code a FOR loop to use this cursor?
       Mark for Review
(1) Points
        FOR loc_rec IN 1 .. loc_curs%ROWCOUNT LOOP ...
        WHILE loc_rec IN loc_curs LOOP ...
        FOR loc_curs IN loc_rec LOOP ...
        IF loc_rec IN loc_curs LOOP ...
        FOR loc_rec IN loc_curs LOOP ... (*)
        Which of the following is a benefit of using a cursor FOR loop?
                                                                                 Mark
for Review
(1) Points
        The exception handling is done automatically. .
        The OPEN, CLOSE, FETCH and EXIT from the loop are done automatically. (*)
        You can OPEN the same cursor twice at the same time.
        Because there is less code, the loop executes faster.
        %ROWCOUNT increments automatically each time a row is FETCHed.
what is wrong with the following piece of code?
FOR emp_record IN emp_cursor LOOP
DBMS_OUTPUT.PUT_LINE(emp_record.last_name);
END LOOP:
IF emp_record.last_name = 'Patel' THEN ...
        Mark for Review
(1) Points
                                      Page 111
```

```
EMP_RECORD has not been explicitly declared.
        The cursor has not been OPENed.
        You cannot reference EMP_RECORD outside the loop. (*)
        It should read: DBMS_OUTPUT.PUT_LINE(emp_cursor.last_name);
        Nothing is wrong, the code will execute correctly.
What is the DISadvantage of using a cursor FOR loop with a subquery?
                                                                         Mark for
Review
(1) Points
        You cannot reference cursor attributes such as %NOTFOUND. (*)
        The execution speed is slower.
        You cannot declare the cursor in the declaration section.
        You cannot use the cursor to join two or more tables.
        There are no disadvantages.
Look at the following code:
DECLARE
CURSOR emp_cursor IS SELECT * FROM employees;
FOR emp_record IN emp_cursor LOOP
DBMS_OUTPUT.PUT_LINE( --Point A -- );
END LOOP;
END;
To display the salary of an employee, what code should you write at Point A?
        Mark for Review
(1) Points
        emp_record.salary (*)
        emp_cursor.salary
        employees.salary
        emp_record.employees.salary
        TO_CHAR(salary)
```

Page 112

Which one of the following is a valid cursor FOR loop with a subquery? Mark for Review (1) Points FOR emp\_rec IN (SELECT last\_name || first\_name FROM employees) LOOP ... FOR emp\_rec IN (SELECT UPPER(last\_name) FROM employees) LOOP ... FOR emp\_rec IN SELECT last\_name, salary\*12 "ANNSAL" FROM employees LOOP ... FOR emp\_rec IN (SELECT last\_name, salary\*12 "ANNSAL" FROM employees) LOOP ... (\*) None of the above. The following cursor has been declared: CURSOR emp\_curs (p\_dept\_id employees.department\_id%TYPE, p\_job\_id employees.job\_id%TYPE) IS SELECT \* FROM employees WHERE department\_id = p\_dept\_id AND job\_id = p\_job\_id; which of the following will correctly open the cursor? Mark for Review (1) Points OPEN emp\_curs(20); FOR emp\_rec IN emp\_curs(20) LOOP ... OPEN emp\_curs('IT\_PROG', 20); FOR emp\_rec IN emp\_curs(20, 'IT\_PROG') LOOP ... (\*) FOR emp\_rec IN emp\_curs(p\_dept\_id p\_job\_id) LOOP . You want to use explicit cursors to fetch and display all the countries in a specific region. There are 19 rows in the WF\_WORLD\_REGIONS table. You want to use a different region each time the cursor is opened. How many cursors should you declare? Mark for Review (1) Points

- 19 cursors, all in the same PL/SQL block.
- 19 cursors in 19 PL/SQL blocks (one in each block).

```
PLSQL feedback final exam semister 1
        20 cursors, in case an extra row is inserted into WF_WORLD_REGIONS later.
        One cursor with a parameter in the WHERE clause. (*)
        None of the above
Look at the following code:
DECLARE
CURSOR emp_curs (p_dept_id employees.department_id%TYPE) IS
SELECT * FROM employees
WHERE department_id = p_dept_id;
v_emp_rec emp_curs%ROWTYPE;
v_deptid NUMBER(4) := 50;
BEGIN
OPEN emp_curs( -- Point A --);
You want to open the cursor, passing value 50 to the parameter. Which of the
following are correct at Point A?
        Mark for Review
(1) Points
         50
        v_deptid
        100 / 2
        All of the above. (*)
Using parameters with a cursor, you can open and close the cursor several times in a block, returning a different active set each
time. True or False?
                         Mark for Review
(1) Points
        True (*)
        False
What is wrong with the following cursor declaration?
CURSOR dept_curs (p_loc_id NUMBER(4)) IS
SELECT * FROM departments
WHERE location_id = p_loc_id;
        Mark for Review
(1) Points
        You cannot reference a cursor parameter in a WHERE clause.
        The parameter should be coded as: (p_loc_id NUMBER) (*)
```

PLSQL feedback final exam semister 1
The parameter should be coded as: (p\_loc\_id IN NUMBER)

Nothing is wrong, the cursor declaration is correct.

What is wrong with the following cursor declaration?

(1) Points

You cannot reference a cursor parameter in a WHERE clause.

The parameter should be coded as: (p\_loc\_id NUMBER) (\*)

The parameter should be coded as: (p\_loc\_id IN NUMBER)

Nothing is wrong, the cursor declaration is correct.

You declare a cursor as a join of two tables:

CURSOR emp\_dept\_curs IS
SELECT last\_name, salary, department\_name
FROM employees e, departments d
WHERE e.department\_id = d.department\_id
-- Point A -- ;

You want to lock fetched rows from EMPLOYEES, but NOT lock fetched rows from DEPARTMENTS.

Which of the following is correct at Point A?

Mark for Review

(1) Points

FOR UPDATE

FOR UPDATE of salary (\*)

FOR UPDATE OF employees

FOR UPDATE (last\_name)

Why can we NOT code:
INSERT INTO table-name
WHERE CURRENT OF cursor\_name;
Mark for Review
(1) Points

```
PLSQL feedback final exam semister 1
```

Because the syntax is wrong. An INSERT statement must have a VALUES (  $\dots$  ) clause.

Because the syntax is wrong. It should be: INSERT INTO cursor-name .... WHERE CURRENT OF table-name;

Because WHERE CURRENT OF ... modifies the most recently FETCHed row, and you cannot FETCH a row that is not in the table yet. (\*)

Because another user has locked the rows and not committed.

Nothing is wrong; we CAN code: INSERT .... WHERE CURRENT OF ...;

You have declared a cursor as SELECT .... FOR UPDATE; You have OPENed the cursor and locked the FETCHed rows. When are these row locks released? Mark for Review (1) Points

When an UPDATE ... WHERE CURRENT OF cursor\_name; is executed.

When you CLOSE the cursor.

When your block finishes executing.

Using parameters with a cursor, you can open and close the cursor several times in a block, returning a different active set each time. True or False? Mark for Review

(1) Points

True (\*)

False

When you explicitly COMMIT or ROLLBACK your transaction. (\*)

When another user tries to SELECT the rows.

You want to fetch rows from the EMPLOYEES table. You want to lock the fetched rows, to prevent other users from updating them. You declare the following cursor:

CURSOR emp\_curs IS
SELECT employee\_id, last\_name, salary
FROM employees
-- Line A -- ;

What should you code at Line A?
Mark for Review

(1) Points

FOR LOCK

```
PLSQL feedback final exam semister 1
        FOR UPDATE OF employees
        FOR UPDATE (*)
        FOR UPDATE (employees)
You have declared the following cursor:
CURSOR country_curs IS SELECT_country_id, country_name
FROM wf_countries
FOR UPDATE WAIT 10;
Another user updates a row in WF_COUNTRIES but does not COMMIT the update. What will
happen when you OPEN country_curs; ?
       Mark for Review
(1) Points
        A LOCKED_ROWS exception is raised immediately.
        The other user's transaction is automatically rolled back.
        Your session waits indefinitely until the other user COMMITS.
        Your session waits for 10 seconds, and then returns control to your block so
that it can continue to execute. (*)
        Your block fails because you should have coded: FOR UPDATE WAIT (10);
What is the difference between the following two blocks of code?
--Block A
DECLARE
    CURSOR emp_cursor IS
    SELECT employee_id, last_name
    FROM employees
    WHERE department_id = 80
    FOR UPDATE OF salary;
--Block B
DECLARE
    CURSOR emp_cursor IS
    SELECT employee_id, last_name
    FROM employees
    WHERE department_id = 80
    FOR UPDATE OF salary
    NOWAIT;
Mark for Review
(1) Points
```

There is no difference; the programs behave exactly the same way.

In Block A, the program waits indefinitely until the rows are available. In Block B, the program returns control immediately so that it can do other work. (\*)

In Block A, the program waits indefinitely until the rows are available. In Block B, control is returned to your program after 5 seconds so that it can do other work.

When can we use the WHERE CURRENT OF clause? Mark for Review (1) Points

Only with an UPDATE, not with a DELETE.

Only with a DELETE, not with an UPDATE.

When the cursor is declared as SELECT ... FOR UPDATE ...; (\*)

When the cursor is based on a single table (not on a join).

When the cursor has not been OPENed.

Assume that table BIGDEPTS contains 100 rows, and table BIGEMPS contains 1000 rows, with 10 employees in each department. Consider the following code:

```
DECLARE
CURSOR bigdept_cur IS
SELECT * FROM bigdepts;
CURSOR bigemp_cur IS
SELECT * FROM bigemps;
BEGIN
FOR dept_rec IN bigdept_cur LOOP
DBMS_OUTPUT.PUT_LINE
(dept_rec.department_name);
FOR emp_rec IN bigemp_cur LOOP
IF emp_rec.department_id=dept_rec.department_id
THEN DBMS_OUTPUT.PUT_LINE (emp_rec.last_name);
END IF;
END LOOP;
END LOOP;
END;
Why is this code inefficient?
        Mark for Review
(1) Points
```

It locks both tables unnecessarily.

It is using two cursors when one cursor is enough.

It is doing a Cartesian Product, joining every employee with every Page 118

PLSQL feedback final exam semister 1 department and displaying 1100 lines of output.

It reads 1000 employee rows every time BIGEMP\_CUR is OPENed, and then ignores 990 of them. (\*)

It is using cursor FOR loops, which are less efficient than OPENing and CLOSEing the cursors

Which of the following is a good reason to use two cursors in a single PL/SQL block?

Mark for Review
(1) Points

To allow one cursor to be opened twice at the same time.

When two tables are related to each other (often by a foreign key) and we want to produce a multilevel report using data from both tables. (\*)

To allow rows to be locked as they are FETCHed.

To speed up the execution of the PL/SQL block.

It is the only way to declare a cursor with a parameter.

Which of the following is NOT allowed when using multiple cursors with parameters? Mark for Review
(1) Points

You cannot use cursor FOR loops.

You cannot declare the cursors FOR UPDATE.

You cannot declare a cursor based on a join.

You cannot OPEN more than one cursor at the same time.

None of the above, they are all allowed. (\*)

You want to produce a report which displays each department and (immediately after each department) a list of employees who work in that department. You declare a DEPARTMENTS cursor as:

CURSOR dept\_curs IS SELECT \* FROM departments ORDER BY department\_id;

How could you declare the EMPLOYEES cursor? (Choose two).

Mark for Review

(1) Points

```
(Choose all correct answers)
        CURSOR emp_curs IS SELECT * FROM employees;
        CURSOR emp_curs (p_dept_id NUMBER) IS SELECT * FROM employees WHERE
department_id = p_dept_id; (*)
        CURSOR emp_curs IS SELECT * FROM employees ORDER BY department_id;
        CURSOR emp_curs (p_dept_id departments.department_id%TYPE) IS SELECT * FROM
employees WHERE department_id = p_dept_id; (*)
        CURSOR emp_curs IS SELECT * FROM employees WHERE department_id =
departments.department_id;
        Examine the following code:
DECLARE
CURSOR region_cur IS
SELECT * FROM wf_world_regions;
v_region_rec region_cur%ROWTYPE;
CURSOR country_cur (p_region_id NUMBER) IS SELECT * FROM wf_countries
WHERE region_id = p_region_id;
v_country_rec country_cur%ROWTYPE;
BEGIN
OPEN region_cur;
L00P
FETCH region_cur INTO v_region_rec;
EXIT WHEN region_cur%NOTFOUND;
DBMS_OUTPUT.PUT_LINE
(v_region_rec.region_name);
-- Line A --
L00P
FETCH country_cur INTO v_country_rec;
EXIT WHEN country_cur%NOTFOUND;
What would you code at Line A?
        Mark for Review
(1) Points
        OPEN country_cur (p_region_id);
        OPEN country_cur (wf_world_regions.region_id);
        OPEN country_cur (v_region_rec.region_id); (*)
        OPEN country_cur (region_cur.region_id);
```

PLSQL feedback final exam semister 1
OPEN country\_cur;

Assume your schema contains 25 tables. How many explicit cursors can you declare and use within a single PL/SQL block?

Mark for Review
(1) Points

Only one.

As many as you need - there is no limit. (\*)

A maximum of three.

As many as you need, but only one of them can be open at any time.

A maximum of 25 (one for each table in your schema).

Assume your schema contains 25 tables. How many explicit cursors can you declare and use within a single PL/SQL block?

Mark for Review
(1) Points

Only one.

As many as you need - there is no limit. (\*)

A maximum of three.

As many as you need, but only one of them can be open at any time.

A maximum of 25 (one for each table in your schema).

ou have declared a cursor as SELECT .... FOR UPDATE; You have OPENed the cursor and locked the FETCHed rows. When are these row locks released? Mark for Review (1) Points

When an UPDATE ... WHERE CURRENT OF cursor\_name; is executed.

When you CLOSE the cursor.

when your block finishes executing.

When you explicitly COMMIT or ROLLBACK your transaction. (\*)

when another user tries to SELECT the rows.

Page 121

```
Examine the following code:
DECLARE
v_a BOOLEAN;
v_b BOOLEAN := FALSE;
v_c BOOLEAN ;
BEGIN
v_c := (v_a \text{ AND } v_b);
-- Line A
END;
What is the value of V_C at Line A?
        Mark for Review
(1) Points
        True
        False (*)
        NULL
        Undefined
         Examine the following code:
DECLARE
v_score NUMBER(3);
v_{grade} CHAR(1);
BEGIN
v_grade := CASE v_score
-- Line A
The CASE expression must convert a numeric score to a letter grade: 90 -> A, 80 ->
B, 70 -> C and so on. What should be coded at Line A?
        Mark for Review
(1) Points
        WHEN 90 THEN grade := 'A'
        WHEN 90 THEN v_grade := 'A';
        WHEN 90 THEN 'A' (*)
        WHEN 90 THEN 'A';
```

```
PLSQL feedback final exam semister 1
        Look at this code:
DECLARE
v_bool BOOLEAN := TRUE;
v_date DATE;
BEGIN
L00P
EXIT WHEN v_bool;
SELECT SYSDATE INTO v_date FROM dual;
END LOOP;
END;
How many times will the SELECT statement execute?
        Mark for Review
(1) Points
        Once.
        Twice.
        Never (the SELECT will not execute at all) (*)
        An infinite number of times because the EXIT condition will never be true
                        Incorrect. Refer to Section 4.
Incorrect
         Examine the following code:
DECLARE
v_count NUMBER := 0;
v_string VARCHAR2(20);
BEGIN
L00P
v_string := v_string || 'x';
IF LENGTH(v_string) > 10 THÉN
EXIT;
END IF:
v_count := v_count + 1;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_count);
END;
What will be displayed when this block is executed?
        Mark for Review
(1) Points
        9
        10 (*)
        11
```

**XXXXXXXXXX** 

You want to calculate and display the multiplication table for "sevens": 7x1=7, 7x2=14, 7x3=21 and so on. Which kind of PL/SQL construct is best for this? Mark for Review (1) Points

A loop (\*)

A CASE statement

IF ... END IF;

A Boolean variable.

Nonprocedural languages allow the programmer to produce a result when a series of steps are followed. True or False?

Mark for Review

True

False (\*)

2. In which three ways does PL/SQL extend the SQL programming language? Mark for Review

(Choose all correct answers)

By adding procedural constructs. (\*)

By adding compound constructs.

By adding iterative control. (\*)

By adding conditional control. (\*)

3. Which of the following statements is true? Mark for Review

You can embed PL/SQL statements within SQL code.

You can embed SQL statements within PL/SQL code. (\*)

You can embed procedural constructs within SQL code.
Page 124

None.

4. PL/SQL stands for: Mark for Review

Processing Language for SQL.

Procedural Language extension for SQL. (\*)

Primary Language for SQL.

Proprietary Language for SQL.

5. Which of the following statements is true? Mark for Review

PL/SQL is an Oracle proprietary, procedural, 3GL programming language. (\*)
PL/SQL is an Oracle proprietary, procedural, 4GL programming language.
PL/SQL is an Oracle proprietary, nonprocedural, 3GL programming language.
PL/SQL is an ANSI-compliant, procedural programming language.

- 6. Which of the following statements about SQL is true? Mark for Review SQL is an Oracle proprietary, nonprocedural, 4GL programming language.

  SQL is an Oracle proprietary, procedural, 3GL programming language.

  SQL is an ANSI-compliant, nonprocedural, 4GL programming language. (\*)

  SQL is an ANSI-compliant, procedural, 4GL programming language.
- 1. Which of the following can be compiled as a standalone program outside the database? Mark for Review (1) Points

A program developed in PL/SQL

```
A program developed in Java
        A program developed in C
        All the above
        Programs developed in Java or C, but not in PL/SQL. (*)
                         Incorrect. Refer to Section 1.
Incorrect
        You can create a Web site application written entirely in PL/SQL. True or
False? Mark for Review
(1) Points
        True (*)
        False
                         Incorrect. Refer to Section 1.
Incorrect
        Procedural constructs give you better control of your SQL statements and ecution. True or False?

Mark for Review
their execution. True or False?
(1) Points
        True (*)
        False
                Correct
       Which of the following can be compiled as a standalone program outside the
database?
               Mark for Review
(1) Points
        A program developed in PL/SQL
        A program developed in Java
        A program developed in C
        All the above
        Programs developed in Java or C, but not in PL/SQL. (*)
                         Incorrect. Refer to Section 1.
Incorrect
                                        Page 126
```

PLSQL feedback final exam semister 1 PL/SQL differs from C and Java in which of the following ways? (Choose two.) 3. Mark for Review (1) Points (Choose all correct answers) It requires an Oracle database or tool. (\*) It does not support object-oriented programming. It is the most efficient language to use with an Oracle database. (\*) It is the most complex programming language to learn. It is not portable to other operating systems. Correct Correct You can create a Web site application written entirely in PL/SQL. True or False? Mark for Review (1) Points True (\*) False Incorrect. Refer to Section 1. Incorrect when multiple SQL statements are combined into PL/SQL blocks, performances. True or False? Mark for Review improves. True or False? (1) Points True (\*) False Correct Correct Which of the following can be done using PL/SQL? Mark for Review (1) Points Create complex applications. Retrieve and modify data in Oracle database tables.

Page 127

Manage database tasks such as security.

PLSQL feedback final exam semister 1 Create custom reports. All of the above (\*) Incorrect. Refer to Section 1. Which of the following can be done using PL/SQL? Mark for Review (1) Points Create complex applications. Retrieve and modify data in Oracle database tables. Manage database tasks such as security. Create custom reports. All of the above (\*) Incorrect. Refer to Section 1.
PL/SQL differs from C and Java in which of the following ways? (Choose two.) Incorrect Mark for Review (1) Points (Choose all correct answers) It requires an Oracle database or tool. (\*) It does not support object-oriented programming. It is the most efficient language to use with an Oracle database. (\*) It is the most complex programming language to learn. It is not portable to other operating systems. Procedural constructs give you better control of your SQL statements and kecution. True or False?

Mark for Review their execution. True or False? (1) Points

Page 128

True (\*)

False

```
Incorrect
                        Incorrect. Refer to Section 1.
       You can create a Web site application written entirely in PL/SQL. True or
False? Mark for Review
(1) Points
        True (*)
        False
Correct
                Correct
       Which of the following can be compiled as a standalone program outside the
               Mark for Review
database?
(1) Points
        A program developed in PL/SQL
        A program developed in Java
        A program developed in C
        All the above
        Programs developed in Java or C, but not in PL/SQL. (*)
                        Incorrect. Refer to Section 1.
       When multiple SQL statements are combined into PL/SQL blocks, performance
improves. True or False?
                               Mark for Review
(1) Points
        True (*)
        False
                        Incorrect. Refer to Section 1.
Incorrect
       Which lines of code will correctly display the message "Hello World"?
(Choose two.)
               Mark for Review
(1) Points
                        (Choose all correct answers)
        DBMS_OUTPUT('Hello world');
        DBMS_OUTPUT.PUT_LINE('Hello World'); (*)
                                      Page 129
```

```
PLSQL feedback final exam semister 1
       DBMS_OUTPUT.PUT_LINE('Hello' || 'World');
       DBMS_OUTPUT.PUT_LINE('Hello' || ' ' || 'World'); (*)
                       Incorrect. Refer to Section 1.
Incorrect
       What are the characteristics of an anonymous block? (Choose two.)
                                                                               Mark
for Review
(1) Points
                        (Choose all correct answers)
       Unamed (*)
       Stored in the database
       Compiled each time the application is executed (*)
       Can be declared as procedures or as functions
               Correct
       Which of the following is NOT a PL/SQL programming environment?
                                                                               Mark
for Review
(1) Points
       Oracle jDeveloper
       SQL*Plus
       gSQL*Plus (*)
       SQL Workshop in Application Express
Correct
               Correct
       Which statements are mandatory in a PL/SQL block? (Choose two.)
                                                                               Mark
for Review
(1) Points
                        (Choose all correct answers)
       DECLARE
       BEGIN (*)
```

```
PLSQL feedback final exam semister 1
        EXCEPTION
        END; (*)
       ct Incorrect. Refer to Section 1. In a PL/SQL block, which of the following should not be followed by a
semicolon?
             Mark for Review
(1) Points
        DECLARE (*)
        END
        All SQL statements
        All PL/SQL statements
                          Incorrect. Refer to Section 1.
Incorrect
        What is wrong with this PL/SQL anonymous block?
BEGIN
    DBMS_OUTPUT.PUT_LINE('Hello');
DBMS_OUTPUT.PUT_LINE(' and Goodbye');
        Mark for Review
(1) Points
        The Declaration section is missing
        The Exception section is missing
        There is nothing wrong with the block, it will work fine.
        The END; statement is missing (*)
                          Incorrect. Refer to Section 1.
Incorrect
        Which of the following is NOT a PL/SQL programming environment?
                                                                                        Mark
6.
for Review
(1) Points
        Oracle jDeveloper
        SQL*Plus
```

Page 131

gSQL\*Plus (\*)

SQL Workshop in Application Express

Correct Correct
7. How can you display results to check that a PL/SQL block is working correctly? Mark for Review
(1) Points

You don't need to do anything, the results will display automatically.

Use an Exception section

Use DBMS\_OUTPUT.PUT\_LINE (\*)

Write a C or Java program to display the results

Incorrect Incorrect. Refer to Section 1.

10. Which of the following is a PL/SQL programming environment? Mark for Review
(1) Points

Oracle Cdeveloper

Java\*Plus

PL/SQL Express

SQL\*Workshop in Application Express (\*)

Incorrect Incorrect. Refer to Section 1.

1. Which statement would select salaries that are greater than or equal to 2500 and less than or equal to 3500? Choose two correct answers. Mark for Review (1) Points

(Choose all correct answers)

WHERE salary  $\Rightarrow$  2500 AND salary  $\Leftarrow$  3500 (\*)

WHERE salary <=2500 AND salary >= 3500

WHERE salary BETWEEN 2500 AND 3500 (\*)

WHERE BETWEEN salary = 2500 AND salary = 3500

Page 132

```
Correct
                   Correct
2. The F_FOOD_ITEMS table contains the FOOD_ITEM_NUMBER and the REGULAR_CODE columns. Which statement would display the FOOD_ITEM_NUMBER joined with the REGULAR_CODE without any space in between them?

Mark for Review
(1) Points
          SELECT food_item_number ' ' regular_code
FROM f_food_items;
          SELECT food_item_number UNION regular_code
FROM f_food_items;
         SELECT food_item_number || regular_code
FROM f_food_items;
(*)
         SELECT food_item_numberregularcode
FROM f_food_items;
                             Incorrect. Refer to Section 1.
         The concatenation operator ... Mark for Review
(1) Points
          Brings columns or character strings together
         Creates a resultant column that is a character expression
         Is represented by two vertical bars ( || )
         All of the above (*)
         Incorrect. Refer to Section 1.
Which of the following statements lists each employee's employee_id, salary,
Incorrect
and salary plus a 20 percent bonus? Mark for Review
(1) Points
          SELECT emp_id, salary, salary*.2
FROM employees;
          SELECT emp_id, salary, salary*1.2
FROM employees;
```

```
PLSQL feedback final exam semister 1
(*)
        SELECT emp_id, salary, salary*.8
FROM employees;
        SELECT emp_id, salary, salary*20
FROM employees;
                        Incorrect. Refer to Section 1.
Incorrect
        Which of the following statements will generate a sentence such as the
following:
The national holiday for United Arab Emirates is Independence Day. for every country in the WF_COUNTRIES table?
        Mark for Review
(1) Points
        SELECT 'The national holiday for '|| country_name || ' is ' ||
national_holiday_name
FROM wf_countries;
SELECT "The national holiday for "|| country_name || " is " || national_holiday_name || "."
FROM wf_countries;
        SELECT 'The national holiday for '|| country_name || ' is ' ||
national_holiday_name || '
FROM wf_countries;
(*)
SELECT 'The national holiday for || country_name || is || national_holiday_name || .'
FROM wf_countries;
(1) Points
        True (*)
        False
                        Incorrect. Refer to Section 1.
```

Page 134

Incorrect

PLSQL feedback final exam semister 1 7. Examine the following statement: SELECT country\_name, population, population\*.01 FROM wf\_countries; How would you modify this statement to display "Country", "Population", and "Expected Growth" as the column headings? Mark for Review (1) Points SELECT country\_name "COUNTRY", population "POPULATION", population\*.01 "EXPECTED GROWTH" FROM wf\_countries; (\*) SELECT country\_name COUNTRY, population POPULATION, population\*.01 EXPECTED GROWTH FROM wf\_countries; SELECT country\_name 'COUNTRY', population 'POPULATION', population\*.01 'EXPECTED GROWTH' FROM wf\_countries; SELECT country\_name, population, population\*.01 FROM wf\_countries
AS "COUNTRY", "POPULATION", "EXPECTED GROWTH"; Incorrect. Refer to Section 1. Incorrect 8. What SQL statement will return the ID, name, and area of all countries in the WF\_COUNTRIES table, listed in order of greatest area to least area? Mark for Review (1) Points SELECT country\_id, country\_name, area FROM wf\_countries ORDER BY area DESC; (\*) SELECT\_country\_id, country\_name, area FROM wf\_countries ORDER BY area ASC;  $\begin{array}{c} {\sf SELECT\ country\_id,\ country\_name,\ area} \\ {\sf FROM\ wf\_countries} \end{array}$ ORDER BY country\_name;

```
PLSQL feedback final exam semister 1
        SELECT country_id, country_name, area
FROM wf_countries
GROUP BY area; pr />
                        Incorrect. Refer to Section 1.
       Which of the following statements diplays the population of the Republic of
Benin (country_id 229) after a 3 percent growth in its population?
Review
(1) Points
SELECT country_name, population*.03 FROM wf_countries
WHERE country_id=229;
        SELECT country_name, population*1.03
FROM wf_countries
WHERE country_id=229;
(*)
        SELECT country_name, population*30
FROM wf_countries
WHERE country_id=229;
        SELECT country_name, population+population*.3
FROM wf_countries
WHERE country_id=229;
                        Incorrect. Refer to Section 1.
       Which of the following statements will display a sentence such as the
following:
Aruba has an area of 193.
for every country in the WF_COUNTRIES table? Mark for Review
(1) Points
        SELECT country_name || ' has an area of ' || area
FROM wf_countries;
        SELECT country_name || 'has an area of' || area
FROM wf_countries;
        SELECT country_name || ' has an area of ' || area || '.'
FROM wf_countries;
(*)
```

```
PLSQL feedback final exam semister 1 SELECT country_name " has an area of " area "."
FROM wf_countries;
Incorrect Incorrect. Refer to Section 1.
11. Which statement would display the departments in the EMPLOYEES table without displaying any duplicates? Mark for Review
displaying any duplicates?
(1) Points
          SELECT ALL department_id
FROM employees;
          SELECT department_id
FROM employees;
          SELECT department_id
FROM employees
having ROWID=1;
          SELECT DISTINCT department_id
FROM employees;
(*)
         Incorrect. Refer to Section 1.
If you want to SELECT all the columns of data in a table, you use which of
the following symbols? Mark for Review
(1) Points
          &
         %
          $
          * (*)
                             Incorrect. Refer to Section 1.
Incorrect
13. What can you use to change the column heading of calculated values in a SQL
statement?
                   Mark for Review
(1) Points
```

Multiplication operator

```
PLSQL feedback final exam semister 1
        Column alias (*)
        Concatenation operator
        The DISTINCT keyword
                         Incorrect. Refer to Section 1
Incorrect
        what does the following SQL SELECT statement return?
SELECT UPPER( SUBSTR('Database Programming', INSTR('Database Programming', 'P'), 20))
FROM dual;
        Mark for Review
(1) Points
        Programming
        PROGRAMMING (*)
        Database
        DATABASE
Correct
                 Correct
        What function would you use to return the highest date in a month?
                                                                                     Mark
for Review
(1) Points
        FINAL_DAY
        END_DAY
        HIGHEST_DAY
        LAST_DAY (*)
        Incorrect. Refer to Section 1.
Which query would return a whole number if today's date is 26-MAY-04?
Incorrect
for Review
(1) Points
        SELECT TRUNC(MONTHS_BETWEEN(SYSDATE, '19-MAR-79') /12)
AS YEARS
FROM DUAL;
(*)
```

```
SELECT TRUNC(YEARS_BETWEEN(SYSDATE, '19-MAR-79') /12)
AS YEARS
FROM DUAL;
         SELECT MONTHS_BETWEEN(SYSDATE, '19-MAR-79') /12
FROM DUAL;
         None of the above
       ect Incorrect. Refer to Section 1.
Assume that today is December 31, 2007. What would be the output of the
following statement?
SELECT TO_CHAR(SYSDATE, 'DD/MM/Y') FROM DUAL;
         Mark for Review
(1) Points
         12/31/7
         31-12-07
         31/12/2007
         31/12/7 (*)
         Incorrect. Refer to Section 1.
The following SQL statement will display the value: 456. True or False?
Incorrect
SELECT TRUNC(ROUND(456.98))
FROM dual;
         Mark for Review
(1) Points
         True
         False (*)
Correct
                   Correct
6. Which statement returns a user password combining the ID of an employee and the first 4 characters of their last name? Mark for Review
(1) Points
         SELECT CONCAT (employee_id, SUBSTR(last_name,4,1))
AS "User Passwords"
                                             Page 139
```

```
PLSQL feedback final exam semister 1
FROM employees;
        SELECT CONCAT (employee_id, INSTR(last_name,4,1))
AS "User Passwords"
FROM employees;
SELECT CONCAT (employee_id, INSTR(last_name,1,4))
AS "User_Passwords"
FROM employees;
        SELECT CONCAT (employee_id, SUBSTR(last_name,1,4))
AS "User Passwords"
FROM employees;
(*)
                          Incorrect. Refer to Section 1.
Incorrect
        Which of the following is not a number function?
                                                                   Mark for Review
(1) Points
        TO_DATE (*)
        ROUND
        MOD
        TRUNC
       ect Incorrect. Refer to Section 1.
Assume that today is January 10, 2008. What would be the output of the
Incorrect
following statement?
SELECT TO_CHAR(SYSDATE, 'ddth "of" Month, YYYY') FROM DUAL;
        Mark for Review
(1) Points
        10th of January, 2008 (*)
        10 January, 2008
        10-January-2008
        January 10th, 2008
```

```
PLSQL feedback final exam semister 1
```

Incorrect. Refer to Section 1. Incorrect 9. NULL means the same thing as a space or 0 (zero). True or False? Mark for Review (1) Points True False (\*) Correct Correct 10. Which SQL statement will display each country's name with the first letter (only) of each word in uppercase? Mark for Review 10. (1) Points SELECT UPPER(country\_name) FROM wf\_countries; SELECT lower(country\_name) FROM wf\_countries; SELECT INITCAP(country\_name) FROM wf\_countries; (\*) SELECT country\_name FROM wf\_countries ORDER BY INITCAP(country\_name); Incorrect. Refer to Section 1. 11. What is returned by the following statement? SELECT\_CONCAT('Today is','Thursday!') FROM DUAL; Mark for Review (1) Points TodayisThursday! Today isThursday! (\*) today is thursday! Today is Thursday!

Incorrect. Refer to Section 1.

Page 141

Incorrect

```
Which function compares two expressions?
                                                                 Mark for Review
(1) Points
         NVL
         NULLIF (*)
         NVL2
         NULL
                           Incorrect. Refer to Section 1.
        After they are declared, variables can be used only once in an application.
True or False? Mark for Review
(1) Points
         True
         False (*)
Correct
                  Correct
         A function called FORMAT_TODAYS_DATE accepts no parameters and returns
today's date in the format: Month DD, YYYY
The following anonymous block invokes the function:
DECLARE v_today DATE; BEGIN -- invoke the function here
Which of the following statements correctly assigns the date variable v\_today to the value returned by the format_todays_date function?
         Mark for Review
(1) Points
         format_todays_date := v_today('Month DD, YYYY');
         v_today := format_todays_date ('Month DD, YYYY');
         v_today := format_todays_date(v_today);
         v_today := TO_DATE(format_todays_date, 'Month DD, YYYY'); (*)
         t Incorrect. Refer to Section 2.
Evaluate the following declaration. Determine whether or not it is legal.
Incorrect
DECLARE
    name,dept VARCHAR2(14);
         Mark for Review
(1) Points
                                            Page 142
```

legal illegal (\*) Correct Correct Evaluate the following declaration. Determine whether or not it is legal. test NUMBER(5); Mark for Review (1) Points legal (\*) illegal Correct Correct Which of the following are required when declaring a variable? (Choose two.) Mark for Review (1) Points (Choose all correct answers) Identifier name (\*) **CONSTANT** Data type (\*) NOT NULL Correct Constants must be initialized. True or False? Mark for Review (1) Points True (\*) False

Incorrect. Refer to Section 2. Incorrect

7. Examine the following variable declarations:
DECLARE v\_number NUMBER := 10; v\_result NUMBER;
Which of the following correctly assigns the value 50 to V\_RESULT? Mark for Review (1) Points

```
v_result := v_number * 5;
        v_result := 100 / 2;
        v_result := ROUND(49.77);
        All of the above. (*)
                          Incorrect. Refer to Section 2.
        Which of the following symbols can be used to enclose a comment in PL/SQL?
Mark for Review
(1) Points
        ? ?
        *//*
        :: ::
        /* */ (*)
Incorrect. Refer to Section 2.

2. The name of a variable is an example of an identifier. True or False? Mark for Review
(1) Points
        True (*)
        False
                 Correct
        What is a lexical unit? Mark for Review
(1) Points
        A data type for a column
        A building block of a PL/SQL block (*)
        A type of variable
Correct
                 Correct
```

Page 144

```
PLSQL feedback final exam semister 1
        Which of the following are lexical units? (Choose two.)

Mark for
Review
(1) Points
                           (Choose all correct answers)
        Data types
         PL/SQL blocks
         Identifiers (*)
        Literals (*)
Incorrect Incorrect. Refer to Section 2.
5. Which of the following is a valid naming convention for an identifier?
(Choose two.) Mark for Review
Incorrect
(1) Points
                           (Choose all correct answers)
        Can include letters or numbers (*)
         Cannot contain a reserved word (*)
         Can be over 30 characters
        Can start with a number or special character
Incorrect
                           Incorrect. Refer to Section 2.
        what characters must enclose non-numeric literal values?
                                                                               Mark for
6.
Review
(1) Points
         Double quotes: " "
         Parentheses: ()
         Single quotes: ' ' (*)
       ect Incorrect. Refer to Section 2.

A datatype specifies and restricts the possible data values that can be
assigned to a variable. True or False? Mark for Review
(1) Points
```

```
PLSQL feedback final exam semister 1
        True (*)
        False
                          Incorrect. Refer to Section 2.
       A Scalar data type holds a ____ value. Mark for Review
(1) Points
        Multi
        Large
        Single (*)
        ct Incorrect. Refer to Section 2.
What are the data types of the variables in the following declaration?
Incorrect
fname VARCHAR2(20);
fname VARCHAR2(15) DEFAULT 'fernandez';
        Mark for Review
(1) Points
        Scalar (*)
        Composite
        LOB
Correct Correct
4. Which of the following is a composite data type? Mark for Review
(1) Points
        CLOB
        VARCHAR2
        RECORD (*)
        DATE
Correct
                 Correct
```

Page 146

```
PLSQL feedback final exam semister 1
Which of the following are scalar data types? (Choose three.) Mark for
Review
(1) Points
                           (Choose all correct answers)
        Array
        Character (*)
        Table
        Date (*)
         Boolean (*)
                           Incorrect. Refer to Section 2.
Incorrect
5. Which of the following are scalar data types? (Choose three.) Mark for
(1) Points
                           (Choose all correct answers)
        Array
        Character (*)
        Table
        Date (*)
         Boolean (*)
        Incorrect. Refer to Section 2.
Which of the following are PL/SQL data types? (Choose three.) Mark for
Incorrect
Review
(1) Points
                           (Choose all correct answers)
        Large Objects (LOB) (*)
        Lexical
         Scalar (*)
```

# PLSQL feedback final exam semister 1 Delimiter Composite (\*) True or False? Mark for Review (1) Points True False (\*) Correct Which of the following is NOT a character data type? Mark for Review (1) Points VARCHAR2 BOOLEAN (\*) CHAR LONG Correct When declared using %TYPE, a variable will inherit \_\_\_\_ from the column on which it is based. Mark for Ŕeview (1) Points The name of the column The value of the column The data type and size of the column (\*) Correct Which of the following is NOT a good guideline for declaring variables?

Declare one identifier per line

Mark for Review (1) Points

```
Use NOT NULL when the variable must have a value
        Code is easier to read if you declare one identifier per line. True or
False? Mark for Review
(1) Points
        True (*)
        False
                Correct
6. Which of the following variable declarations does NOT use a number data type? Mark for Review
(1) Points
        v_count PLS_INTEGER := 0;
        v_median_age NUMBER(6,2);
        v_students LONG; (*)
        v_count BINARY_INTEGER;
        When a join condition is omitted completely the result is a Cartesian
product in which all combinations of rows will be displayed. True or False?
                                                                                  Mark
for Review
(1) Points
        True (*)
        False
                         Incorrect. Refer to Section 2.
Incorrect
      A nonequijoin combines tables that have one or more exact matching columns.
True or False? Mark for Review
(1) Points
        True
```

Use column names as identifiers (\*)

```
False (*)
        Incorrect. Refer to Section 2. What kind of join is used in the following example?
Incorrect
SELECT e.employee_id, e.last_name, j.grade_level
FROM employees e, job_grades j
WHERE e.salary BETWEEN j.lowest_sal and j.highest_sal;
        Mark for Review
(1) Points
        Simple join
        Equijoin
        Nonequijoin (*)
        Outer join
Correct
                 Correct
        Table aliases can be used to shorten the syntax in join statements. True or
False? Mark for Review
(1) Points
        True (*)
        False
                          Incorrect. Refer to Section 2.
        will the following statement execute correctly?
SELECT department_id, department_name, last_name
FROM employees e, departments d
WHERE e.department_id = d.department_id;
        Mark for Review
(1) Points
        Yes, there are no errors in this statement.
        No, because one column has been ambiguously defined. (*)
        No, because every column must be prefixed by its table alias, for example:
e.last_name.
```

Yes, Oracle will resolve which department\_id column comes from which table.

Correct Correct What type of join returns rows for one table even when there are no matching rows in the other table? Mark for Review (1) Points Simple join Equijoin Nonequijoin Outer join (\*) Incorrect Incorrect. Refer to Section 2. what does the following statement return? SELECT e.last\_name, d.department\_id, d.department\_name FROM employees e, departments d WHERE e.department\_id(+) = d.department\_id ORDER BY e.department\_id; Mark for Review (1) Points Returns all departments, even if there are no employees in the department. (\*) Returns all employees, even if they have not been assigned to a department. Returns only those departments that contain at least one employee Returns all possible combinations of employees and departments. Correct Correct If table A has 20 rows and table B has 10 rows, how many rows will be returned if you perform a Cartesian product on those two tables? Mark for Review (1) Points 20 10 200 (\*) 120

Correct Correct The following EMPLOYEE\_ID, SALARY, and COMMISSION\_PCT data in the EMPLOYEES table for six employees. 143, 2600, null 144, 2500, null DATA: 149, 10500, .2 174, 11000, .3 176, 8600, .2 178, 7000, .15 What is the result of the following statement: SELECT AVG(commission\_pct) FROM employees WHERE employee\_id IN( 143,144,149,174,176,178) Mark for Review (1) Points 0.1416 0.2125 (\*) The statement will fail because you cannot use more than one group function in a single statement. 0.2521 Correct Correct What will be returned when the following statement is executed? SELECT last\_name FROM employees WHERE salary > ALL (SELECT salary FROM employees WHERE job\_id = 'IT\_PROG'); Mark for Review (1) Points The names of all IT Programmers. The names of employees who earn more than every IT Programmer. (\*) The names of employees who earn more than at least one IT Programmer.

The names of employees who earn more than half of the IT Programmers.

```
PLSQL feedback final exam semister 1
Review
(1) Points
         True (*)
          False
Incorrect Incorrect. Refer to Section 2.4. Read the following SELECT statement. Choose the column or columns that MUST be included in the GROUP BY clause.
SELECT_region_id, COUNT(country_id)
FROM wf_countries
GROUP BY ?????
         Mark for Review
(1) Points
          region_id, COUNT(country_id)
          region_id,country_id
          country_id
          region_id (*)
         Incorrect. Refer to Section 2.
Single row subqueries may NOT include which of these operators?
                                                                                                   Mark
for Review
(1) Points
         ALL (*)
          <>
                              Incorrect. Refer to Section 2.
      Which of the following SQL statements will display the name and a total of e with the same last name?

Mark for Review
people with the same last name?
(1) Points
          SELECT last_name, COUNT(employee_id)
FROM EMPLOYEES
GROUP BY last_name;
```

Page 153

(\*)

SELECT employee\_id, COUNT(last\_name)
FROM EMPLOYEES
GROUP BY last\_name;

SELECT last\_name, DISTINCT COUNT(employee\_id) FROM EMPLOYEES GROUP BY last\_name;

SELECT employee\_id, DISTINCT(last\_name) FROM EMPLOYEES GROUP BY last\_name;

True

False (\*)

Correct
8. What would the following SQL statement return?
SELECT MAX(hire\_date) FROM employees; Mark for Review
(1) Points

The hire date of the longest serving employee.

The hire date of the newest (most recently hired) employee. (\*)

The hire dates of all employees in ascending order.

The hire dates of all employees.

Correct Correct

1. Which of the following is correct? Mark for Review
(1) Points

 $v_family_name = SMITH;$ 

```
PLSQL feedback final exam semister 1
         V_FAMILY_NAME = SMITH;
         v_family_name := SMITH;
         v_family_name := 'SMITH'; (*)
         ct Incorrect. Refer to Section 2.
When PL/SQL converts data automatically from one data type to another, it is
_____ conversion. Mark for Review
Incorrect
called
            ____ conversion.
(1) Points
          Explicit
          Implicit (*)
         TO_CHAR
         The DECODE and MAX functions can be used in PL/SQL statements. True or
False? Mark for Review
(1) Points
         True
         False (*)
                   Correct
Correct
4. Examine the following code: DECLARE x VARCHAR2(20); BEGIN x := 5 + 4 * 5; DBMS_OUTPUT.PUT_LINE(x); END; What value of x will be displayed? Mark for
Review
(1) Points
          45
          29
         25 (*)
          14
                             Incorrect. Refer to Section 2.
         Which of the following statements about implicit conversions is NOT true?
Mark for Review
(1) Points
```

Code containing implicit conversions typically runs faster than code containing explicit conversions. (\*)

Code containing implicit conversions may not work in the future if Oracle changes the conversion rules.

Code containing implicit conversions is harder to read and understand.

Incorrect Incorrect. Refer to Section 2.
6. The LENGTH and ROUND functions can be used in PL/SQL statements. True or False? Mark for Review
(1) Points

True (\*)

False

Incorrect Incorrect. Refer to Section 2.
7. Which of the following data type conversions can be done implicitly? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

DATE to NUMBER

NUMBER to VARCHAR2 (\*)

NUMBER to PLS\_INTEGER (\*)

Incorrect Incorrect. Refer to Section 2. 8. Which of the following are valid PL/SQL operators? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

Concatenation (\*)

Exception

Exponential (\*)

Arithmetic (\*)

```
Incorrect. Refer to Section 2. What will happen when the following code is executed?
Incorrect
DECLARE v_new_date DATE;
BEGIN
v_new_date := 'Today';
DBMS_OUTPUT.PUT_LINE(v_new_date);
        Mark for Review
(1) Points
        The block will execute and display today's date.
        The block will execute and display the word "Today".
        The block will fail because the character value "Today" cannot be implicitly
converted to a date. (*)
Incorrect
                         Incorrect. Refer to Section 2
PL/SQL statements must be written on a single line.
                                                            Mark for Review
(1) Points
        True
        False (*)
Correct
                 Correct
Which explicit function is used to convert a character into a number? Mark for
Review
(1) Points
        TO_DATE
        TO_NUMBER (*)
        TO_CHAR
Incorrect
                         Incorrect. Refer to Section 2.
        Examine the following block. What should be coded at Line A?
v_char VARCHAR2(8) := '24/09/07';
v_date DATE;
BEGIN
v_date := ..... Line A
END;
        Mark for Review
(1) Points
                                        Page 157
```

```
v_date := FROM_CHAR(v_char, 'dd/mm/yy');
         v_date := TO_DATE(v_char, 'dd/mm/yy'); (*)
         v_date := v_char;
                   Correct
PL/SQL can implicitly convert a CHAR to a NUMBER, provided the CHAR contains a numeric value, for example '123'. True or False? Mark for Review
(1) Points
         True (*)
         False
                             Incorrect. Refer to Section 2.
Incorrect
          Using implicit conversions is good programming practice. Mark for
Review
(1) Points
         True
         False (*)
                   Correct
The TO_CHAR function is used for explicit data type conversions. True or False?
Mark for Review
(1) Points
         True (*)
          False
Correct
                   Correct
1. Examine the following code: DECLARE x VARCHAR2(20); BEGIN x := 5 + 4 * 5; DBMS_OUTPUT.PUT_LINE(x); END; What value of x will be displayed? Mark for
Review
(1) Points
          45
          29
```

```
14
        what will happen when the following code is executed?
DECLARE v_new_date DATE;
BEGIN
v_new_date := 'Today';
DBMS_OUTPUT.PUT_LINE(v_new_date);
END;
        Mark for Review
(1) Points
        The block will execute and display today's date.
        The block will execute and display the word "Today".
        The block will fail because the character value "Today" cannot be implicitly
converted to a date. (*)
                         Incorrect. Refer to Section 2.
Incorrect
        Which of the following data type conversions can be done implicitly? (Choose
        Mark for Review
two.)
(1) Points
                         (Choose all correct answers)
        DATE to NUMBER
        NUMBER to VARCHAR2 (*)
        NUMBER to PLS_INTEGER (*)
                         Incorrect. Refer to Section 2.
Incorrect
        Using implicit conversions is good programming practice. Mark for
Review
(1) Points
        True
        False (*)
        which of the following are valid PL/SQL operators? (Choose three.)
                                                                                   Mark
                                       Page 159
```

25 (\*)

```
for Review
(1) Points
                           (Choose all correct answers)
        Concatenation (*)
        Exception
        Exponential (*)
        Arithmetic (*)
                          Incorrect. Refer to Section 2.
6. PL/SQL can implicitly convert a CHAR to a NUMBER, provided the CHAR contains a numeric value, for example '123'. True or False? Mark for Review
(1) Points
        True (*)
        False
                          Incorrect. Refer to Section 2.
        Which explicit function is used to convert a character into a number?
for Review
(1) Points
        TO_DATE
        TO_NUMBER (*)
        TO_CHAR
        Examine the following block. What should be coded at Line A?
DECLARE
v_{char} VARCHAR2(8) := '24/09/07';
v_date DATE;
BEGIN
v_date := ..... Line A
END;
        Mark for Review
(1) Points
        v_date := FROM_CHAR(v_char, 'dd/mm/yy');
```

Page 160

```
PLSQL feedback final exam semister 1
v_date := TO_DATE(v_char, 'dd/mm/yy'); (*)
         v_date := v_char;
Incorrect
                           Incorrect. Refer to Section 2.
9. When PL/SQL converts data automatically from one data type to another, it is
called _____ conversion. Mark for Review
(1) Points
         Explicit
         Implicit (*)
         TO_CHAR
                  Correct
10. The LENGTH and ROUND functions can be used in PL/SQL statements. True or
False? Mark for Review
(1) Points
         True (*)
         False
Incorrect Incorrect. Refer to Section 2.

11. The TO_CHAR function is used for explicit data type conversions. True or False? Mark for Review

(1) Points
(1) Points
         True (*)
         False
Correct Correct 12. PL/SQL statements must be written on a single line. Mark for Review
(1) Points
         True
         False (*)
13. Which of the following is correct? Mark for Review
                                           Page 161
```

```
PLSQL feedback final exam semister 1
(1) Points
        v_family_name = SMITH;
        V_FAMILY_NAME = SMITH;
        v_family_name := SMITH;
        v_family_name := 'SMITH'; (*)
Incorrect
                         Incorrect. Refer to Section 2.
        The DECODE and MAX functions can be used in PL/SQL statements. True or
False? Mark for Review
(1) Points
        True
        False (*)
                Correct
        Which of the following statements about implicit conversions is NOT true?
15.
Mark for Review
(1) Points
        Code containing implicit conversions typically runs faster than code
containing explicit conversions. (*)
        Code containing implicit conversions may not work in the future if Oracle
changes the conversion rules.
        Code containing implicit conversions is harder to read and understand.
        Incorrect. Refer to Section 2.
What values will be displayed when the following code is executed?
Incorrect
DECLARE
    v_mynum NUMBER;
BEGIN
    v_mynum := 7;
    DECLARE
       v_mynum NUMBER;
    BEGIN
       DBMS_OUTPUT.PUT_LINE(v_mynum);
       v_mynum := 3;
    END:
    DBMS_OUTPUT.PUT_LINE(v_mynum);
END;
        Mark for Review
```

Page 162

```
(1) Points
       3,3
       3,7
       Null, 7 (*)
       Null, 3
Incorrect
                      Incorrect. Refer to Section 2.
       what happens when an exception occurs in the executable section of a PL/SQL
block? Mark for Review
(1) Points
       Oracle keeps trying to re-execute the statement which caused the exception.
       The remaining statements in the executable section are not executed.
Instead, Oracle looks for an EXCEPTION section in the block. (*)
       The remaining statements in the executable section of the block are
executed.
       The exception is always propagated to the calling environment.
DECLARE
   v_myvar NUMBER; -- This is V1
BEGIN
   DECLARE
      v_myvar NUMBER := 8;
      BEGIN
         -- Line A
      END;
END;
       Mark for Review
(1) Points
       At Line A, code:
v_myvar := 25;
       Label both blocks and at line A, code:
v_myvar := 25;
```

It cannot be done because the outer block's  $v_myvar$  is out of scope at Line A.

Label the outer block and (at Line A) dot-prefix  $v_{my}$  with the block label.

(\*)

It cannot be done because the outer block's v\_myvar is in scope but not visible at Line A.

Incorrect Incorrect. Refer to Section 2.

4. An inner block is nested within an outer block. An exception occurs within the inner block, but the inner block does not have an EXCEPTION section. What happens?

Mark for Review
(1) Points

The exception is propagated to the outer block and the remaining executable statements in the outer block are skipped. (\*)

The exception is propagated to the outer block and the remaining executable statements in the outer block are executed.

Oracle automatically tries to re-execute the inner block.

The outer block is bypassed and the exception is always propagated to the calling environment.

The outer block has no label.

Variable  $v_a$  is out of scope within the inner block and therefore cannot be referenced.

```
The inner block has no END; statement. (*)
        Nothing is wrong, the code will execute successfully.
Correct
                Correct
       Examine the following code. What is the scope of variable v_myvar?
DECLARE
    v_myvar NUMBER;
BEGIN
    v_myvar := 6;
    DECLARE
       v_hervar NUMBER;
    BEGIN
       v_{hervar} := 4;
END; Mark for Review
(1) Points
        Only the outer block
        Both the inner and the outer block (*)
        Only the inner block
        Neither block
                        Incorrect. Refer to Section 2.
        Examine the following nested blocks. Line B causes an exception. What will
be displayed when this code is executed?
DECLARE
    var_1 NUMBER;
BEGIN
    var_1 := 4;
    DECLARE
       var_2 NUMBER;
    BEGIN
       var_2 := 'Unhappy'; -- Line B
       var_1 := 8;
    END;
var_1 := 12;
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE(var_1);
        Mark for Review
(1) Points
        Unhappy
```

12

2. To modify an existing row in a table, you can use the \_\_\_\_\_ statement.

Mark for Review (1) Points

MODIFY

**INSERT** 

**ALTER** 

UPDATE (\*)

The UPDATE clause must include the target table name: UPDATE emps SET ....

The INSERT clause must include a column list as well as a list of column values.

The SET clause is trying to update the source table from the target table.

Nothing is wrong, the statement will execute correctly.

Correct

4. You want to modify existing rows in a table. Which of the following are NOT needed in your SQL statement? (Choose Two)

Mark for Review

(1) Points

(Choose all correct answers)

A MODIFY clause (\*)

An UPDATE clause

The name of the table

The name of the column(s) you want to modify.

A new value for the column you want to modify (this can be an expression or a subquery).

A WHERE clause. (\*)
5. Is it possible to insert more than one row at a time using an INSERT
Page 167

PLSQL feedback final exam semister 1 statement with a VALUES clause? Mark for Review (1) Points

No, you can only create one row at a time when using the VALUES clause. (\*)

Yes, you can list as many rows as you want, just remember to separate the rows with commas.

No, there is no such thing as INSERT ... VALUES.

Incorrect Incorrect. Refer to Section 3. What would be the result of the following statement: DELETE employees; Mark for Review
(1) Points

Nothing, no data will be changed.

All rows in the employees table will be deleted. (\*)

The statement will fail because it contains a syntax error.

The row with EMPOYEE\_ID=100 will be deleted.

Incorrect Incorrect. Refer to Section 3.
When inserting a row into a table, the VALUES clause must include a value for every column of the table. True or False? Mark for Review
(1) Points

True

False (\*)

Correct

Look at this SQL statement: MERGE INTO old\_trans ot USING new\_trans nt ON (ot.trans\_id = nt.trans\_id) ....; OLD\_TRANS is the source table and NEW\_TRANS is the target table. True or false?

Mark for Review
(1) Points

True

False (\*)

PLSQL feedback final exam semister 1 as column names. True or False? Mark for Review (1) Points

True

False (\*)

Correct

2. Look at this PL/SQL block: DECLARE v\_count NUMBER; BEGIN SELECT COUNT(\*)

INTO v\_count FROM employees WHERE salary > 50000; END; No employees earn more than \$50000. Which of the following statements are true? (Choose two). Mark for Review

(1) Points

(Choose all correct answers)

The SELECT will return value 0 into V\_COUNT. (\*)

The SELECT will fail because it does NOT return exactly one row.

The block will fail because variable V\_SALARY was not declared.

The SELECT returns exactly one row. (\*)

The block will fail because no results are displayed to the user.

Incorrect Incorrect. Refer to Section 3.

Which of the following is NOT a valid guideline for retrieving data in PL/SQL?

Mark for Review
(1) Points

Terminate the SQL statement with a semicolon (;)

Do NOT use a WHERE clause in SELECT statements. (\*)

Where possible, declare variables using the %TYPE attribute.

Specify the same number of variables in the INTO clause as database columns in the SELECT clause.

PLSQL feedback final exam semister 1 **INSERT UPDATE** SELECT (\*) **MERGE DELETE** Correct Which SQL statements can be used directly in a PL/SQL block? (Choose two.) Mark for Review (1) Points (Choose all correct answers) GRANT EXECUTE ON ... SELECT \* INTO ... (\*) REVOKE SELECT ON ... UPDATE employees SET... (\*) ALTER TABLE employees ... Incorrect. Refer to Section 3. Does PL/SQL allow you to have a variable with the same name as a database column? Mark for Review (1) Points No Yes (\*) Correct Correct 7. What will happen when the following block is executed? DECLARE v\_last employees.last\_name%TYPE; v\_first employees.first\_name%TYPE; v\_salary employees.salary%TYPE; BEGIN SELECT first\_name, last\_name INTO v\_first, v\_last, v\_salary FROM employees where employee\_id=100; END; Mark for Review (1) Points

The block will fail because the SELECT statement returns more than one row.

The block will fail because the SELECT is trying to read two columns into three PL/SQL variables. (\*)

The block will fail because V\_LAST was declared before V\_FIRST.

The block will execute successfully, and the  $V\_SALARY$  variable will be set to NULL.

Incorrect Incorrect. Refer to Section 3.

8. Which one of these SQL statements can be directly included in a PL/SQL executable block? Mark for Review
(1) Points

IF... THEN...;
INSERT INTO...; (\*)
SELECT \* FROM DUAL;

SHOW USER;

No rows are updated but the block completes successfully.

Every employee row is updated. (\*)

An exception is raised because you cannot give a variable the same name as a table column.

An exception is raised because the UPDATE statement did not modify any rows.

Correct

2. A PL/SQL block contains the following DML statement: UPDATE wf\_countries
SET population = population \* 1.1 WHERE country\_id = 229; Which kind of cursor is
used for this statement? Mark for Review

(1) Points

An implicit cursor named "WF\_COUNTRIES".

An implicit cursor named "SQL". (\*)

An explicit cursor named "SQL".

An explicit cursor which must be declared and named by the PL/SQL programmer.

Incorrect Incorrect. Refer to Section 3.

3. There are three employees in department 90. What will be displayed when the following code is executed? DECLARE v\_open CHAR(3) := 'NO'; BEGIN UPDATE employees SET job\_id = 'ST\_CLERK' WHERE department\_id = 90; IF SQL%FOUND THEN v\_open := 'YES'; END IF; DBMS\_OUTPUT.PUT\_LINE(v\_open || ' ' || SQL%ROWCOUNT); END; Mark for Review

(1) Points

NO 3

YES 1

YES 3 (\*)

Nothing will be displayed. The block will fail because you cannot use implicit cursor attributes directly in a call to DBMS\_OUTPUT.PUT\_LINE.

Correct
4. You can use implicit cursor attributes such as SQL%ROWCOUNT directly inside a DML statement. For example: INSERT INTO log\_table VALUES (SYSDATE, USER, SQL%ROWCOUNT); True or False? Mark for Review
(1) Points

True

False (\*)

Correct Correct
5. Which of the following use an implicit cursor? Mark for Review
(1) Points

DML statements only.

SELECT statements only.

DML statements and SELECT statements which return a single row. (\*)

```
\, PLSQL feedback final exam semister 1 COMMIT and ROLLBACK statements only.
```

Correct

```
which of the following SQL DML commands can be used inside a PL/SQL block?
Mark for Review
(1) Points
         INSERT and UPDATE only.
         UPDATE and DELETE only.
         INSERT, UPDATE and DELETE only.
         INSERT, UPDATE, DELETE and MERGE. (*)
Correct
                   Correct
         How many INSERTs can you have in one transaction? Mark for Review
(1) Points
         One
         As many as you want until you do a COMMIT or ROLLBACK. (*)
         As many as you can execute before the database does an AUTOSAVE.
         As many as you want until a different DML statement (UPDATE, DELETE or
MERGE) is executed.
                            Incorrect. Refer to Section 3.
Incorrect
         How many transactions are in the following block?
BEGIN
    INSERT INTO countries (country_id, country_name)
VALUES ('XA', 'Xanadu');
INSERT INTO countries (country_id, country_name)
VALUES ('NV', 'Neverland');
UPDATE countries SET country_name='Deutchland'
        WHERE country_id='DE'
    UPDATE countries SET region_id=1
        WHERE country_name LIKE '%stan';
END;
How many transactions are shown above?
         Mark for Review
(1) Points
```

Two; both the INSERTs are one transaction and both the UPDATEs are a second transaction.

It depends on how many rows are updated - there will be a separate transaction for each row.

One (\*)

cool cats

big birds and cool cats

aardvaarks and cool cats (\*)

aardvaarks, big birds and cool cats

Correct Correct
4. In a PL/SQL block, where can you code a COMMIT statement? Mark for Review
(1) Points

In any section of the block: Declaration, Executable, or Exception.

Only the Executable section.

In the Executable and/or the Exception sections. (\*)

Nowhere; the COMMIT statement must be outside the block.

Incorrect Incorrect. Refer to Section 3.

1. Which of the following statements are true about PL/SQL conditional control structures such as IF ..., CASE ... and loops?

Page 174

(1) Points

They allow the programmer to use logical tests to determine which statements are executed and which are not.

They allow a set of statements to be executed repeatedly (i.e. more than once).

They determine a course of action based on conditions.

All of the above. (\*)

Incorrect Incorrect. Refer to Section 4.

2. We want to execute one of three statements depending on whether the value in V\_VAR is 10, 20 or some other value. What should be coded at Line A? IF v\_var = 10 THEN statement1; -- Line A statement2; ELSE statement3; END IF; Mark for Review

(1) Points

ELSE IF  $v_var = 20$  THEN

ELSIF  $v_var = 20$ 

ELSIF  $v_var = 20$  THEN (\*)

IF  $v_var = 20$  THEN

Incorrect Incorrect. Refer to Section 4.
3. What is wrong with the following trivial IF statement:

IF and THEN must be on the same line: IF (v\_job='President') THEN ...

The condition should be coded: IF (v\_job := 'President')

END IF; is missing (\*)

ELSE is missing

Correct Correct

4. Which one of the following is correct syntax for an IF statement?

Page 175

Mark

```
PLSQL feedback final exam semister 1
for Review
(1) Points
          IF condition THEN DO statement1; statement2; END IF;
          IF condition THEN statement1; statement2; END IF; (*)
          IF condition THEN statement1; statement2; ENDIF;
          IF condition THEN statement1; AND statement2; END IF;
                              Incorrect. Refer to Section 4.
Incorrect
         What will be displayed when this block is executed? DECLARE v_bool1 BOOLEAN
:= NULL; v_bool2 BOOLEAN := NULL; v_char VARCHAR(10) := 'Start'; BEGIN IF (v_bool1 = v_bool2) THEN v_char:='Equal'; ELSE v_char:='Not equal'; END IF;
DBMS_OUTPUT.PUT_LINE(v_char); END; Mark for Review
(1) Points
          Equal
          Not equal (*)
          Start
          Nothing will be displayed. The block will fail because you cannot compare
two null values.
                             Incorrect. Refer to Section 4.
Incorrect
6. What will be displayed when this block is executed? DECLARE v_bool1 BOOLEAN := TRUE; v_bool2 BOOLEAN; v_char VARCHAR(4) := 'up'; BEGIN IF (v_bool1 AND v_bool2)
THEN v_char:='down'; ELSE v_char:='left'; END IF; DBMS_OUTPUT.PUT_LINE(v_char); END;
          Mark for Review
(1) Points
          up
          down
          left (*)
          null
                              Incorrect. Refer to Section 4.
Incorrect
          Look at the following (badly written) code:
```

Page 176

```
PLSQL feedback final exam semister 1
age := 5; IF age<30 THEN mature := 'adult';
ELSIF age<22 THEN mature := 'teenager';
ELSIF age<13 THEN mature := 'child';
END IF;
DBMS_OUTPUT.PUT_LINE(mature);
what will be displayed when this code is executed?
        Mark for Review
(1) Points
         child.
         teenager
         adult (*)
         adultteenagerchild
        Incorrect. Refer to Section 4.
You want to repeat a set of statements 100 times, incrementing a counter
Incorrect
each time. What kind of PL/SQL control structure would you use?
                                                                                   Mark for
Review
(1) Points
         IF...THEN...ELSE
         IF...THEN...ELSIF...ELSE
         CASE...WHEN...THEN
         A loop. (*)
Correct
                  Correct
          Examine the following code:
DECLARE
v_a BOOLEAN;
v_b BOOLEAN := FALSE;
v_c BOOLEAN ;
BEGIN
v_c := (v_a \text{ AND } v_b);
-- Line A
END;
What is the value of V_C at Line A?
        Mark for Review
(1) Points
```

```
False (*)
        NULL
        Undefined
Incorrect
                          Incorrect. Refer to Section 4.
        Look at the following code:
2.
DECLARE
x BOOLEAN := FALSE;
y BOOLEAN := FALSE;
z BOOLEAN ;
BEGIN
z := (x OR NOT y);
-- Line A
END;
What is the value of Z at Line A?
        Mark for Review
(1) Points
        True (*)
        False
        NULL
        An error will occur because you cannot combine two Boolean variables using
"NOT".
                          Incorrect. Refer to Section 4.
        What will be displayed when the following block is executed?
DECLARE
v_age1 NUMBER(3);
v_age2 NUMBER(3);
v_message VARCHAR2(20);
BEGIN
WHEN v_age1 = v_age2 THEN v_message := 'Equal';
WHEN v_age1 <> v_age2 THEN v_message := 'Unequal';
ELSE v_message := 'Undefined';
END CASE;
DBMS_OUTPUT.PUT_LINE(v_message);
END;
        Mark for Review
(1) Points
```

```
Equal
        Undefined (*)
        Unequal
        Nothing will be displayed because V_MESSAGE is set to NULL.
                         Incorrect. Refer to Section 4.
Incorrect
         Examine the following code:
DECLARE
v_score NUMBER(3);
v_grade CHAR(1);
BEĞIN
v_grade := CASE v_score
-- Line A
The CASE expression must convert a numeric score to a letter grade: 90 -> A, 80 ->
B, 70 -> C and so on. What should be coded at Line A?
        Mark for Review
(1) Points
        WHEN 90 THEN grade := 'A'
        WHEN 90 THEN v_grade := 'A';
        WHEN 90 THEN 'A' (*)
        WHEN 90 THEN 'A';
                         Incorrect. Refer to Section 4.
Incorrect
       Examine the following code:
DECLARE
v_score NUMBER(3);
v_grade CHAR(1);
BEGIN
CASE v_score
-- Line A
The CASE statement must convert a numeric score to a letter grade: 90 -> A, 80 -> B,
70 \rightarrow C and so on.
What should be coded at Line A?
       Mark for Review
(1) Points
```

```
PLSQL feedback final exam semister 1
          WHEN 90 THEN v_grade := 'A'
          WHEN 90 THEN v_grade := 'A'; (*)
          WHEN 90 THEN 'A'
          WHEN 90 THEN 'A';
                               Incorrect. Refer to Section 4.
Incorrect
          How must you end a CASE statement?
                                                              Mark for Review
(1) Points
          END;
          END CASE; (*)
          END IF;
          ENDCASE;
                               Incorrect. Refer to Section 4.
Incorrect
          What will be displayed when the following block is executed?
DECLARE
v_age NUMBER(3);
v_gender VARCHAR2(6) := 'Female';
v_status VARCHAR2(20);
BEGIN
CASE
WHEN v_age >= 18 AND v_gender = 'Male' THEN v_status := 'Adult Male';
WHEN v_age >= 18 AND v_gender = 'Female' THEN v_status := 'Adult Female';
WHEN v_age < 18 AND v_gender = 'Male' THEN v_status := 'Junior Male';
WHEN v_age < 18 AND v_gender = 'Male' THEN v_status := 'Junior Female';
WHEN v_age < 18 AND v_gender = 'Female' THEN v_status := 'Junior Female';
ELSE v_status := 'Other Value';
END CASE;
DBMS_OUTPUT.PUT_LINE(v_status);
END;
          Mark for Review
(1) Points
          Adult Male
           Junior Female
          Other Value (*)
```

```
Incorrect. Refer to Section 4.
8. How must you end a CASE expression? Mark for Review
(1) Points
       END; (*)
       ENDIF;
       END CASE;
       ENDCASE;
                       Incorrect. Refer to Section 4.
Incorrect
       Which kind of loop is this?
i := 10;
LOOP
   i := i + 1;
   EXIT WHEN i > 30;
END LOOP;
       Mark for Review
(1) Points
       A FOR loop.
       A WHILE loop.
       A basic loop. (*)
       An infinite loop.
       A nested loop.
                       Incorrect. Refer to Section 4.
Incorrect
       For which one of these tasks should you use a PL/SQL loop? Mark for
2.
Review
(1) Points
       Updating the salary of one employee.
```

Nothing will be displayed because V\_STATUS is set to NULL.

true. (\*)

Executing the same set of statements repeatedly until a condition becomes

```
Making a decision based on whether a condition is true or not.
                        Incorrect. Refer to Section 4.
Incorrect
        what are the three kinds of loops in PL/SQL?
                                                        Mark for Review
(1) Points
        ascending, descending, unordered
        infinite, finite, recursive
        IF, CASE, LOOP
        FOR, WHILE, basic (*)
Incorrect
                        Incorrect. Refer to Section 4.
        How many EXIT statements can be coded inside a basic loop? Mark for
Review
(1) Points
        None.
        One only.
        Two.
        As many as you need, there is no limit. (*)
                Correct
       Look at this code:
DECLARE
v_bool BOOLEAN := TRUE;
v_date DATE;
BEGIN
L00P
EXIT WHEN v_bool;
SELECT SYSDATE INTO v_date FROM dual;
END LOOP;
END;
How many times will the SELECT statement execute?
       Mark for Review
(1) Points
```

Once.

PLSQL feedback final exam semister 1

Deciding whether a value is within a range of numbers.

```
Twice.
         Never (the SELECT will not execute at all) (*)
        An infinite number of times because the EXIT condition will never be true
Incorrect
                           Incorrect. Refer to Section 4.
          Examine the following code:
6.
DECLARE
v_count NUMBER := 0;
v_string VARCHAR2(20);
BEGIN
L00P
v_string := v_string || 'x';
IF LENGTH(v_string) > 10 THEN
EXIT;
END IF;
v_{count} := v_{count} + 1;
END LOOP:
DBMS_OUTPUT.PUT_LINE(v_count);
END;
what will be displayed when this block is executed?
         Mark for Review
(1) Points
         9
         10 (*)
         11
        XXXXXXXXXX
        Incorrect. Refer to Section 4. What will be displayed when this block is executed?
Incorrect
DECLARE
v_count NUMBER := 10;
v_result NUMBER;
BEGIN
L00P
v_count := v_count - 1;
EXIT WHEN v_count < 5;
v_result := v_count * 2;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_result);
END;
        Mark for Review
```

```
PLSQL feedback final exam semister 1
(1) Points
           8
           10 (*)
           12
           NULL
Incorrect Incorrect. Refer to Section 4.

8. You want to calculate and display the multiplication table for "sevens": 7x1=7, 7x2=14, 7x3=21 and so on. Which kind of PL/SQL construct is best for this? Mark for Review
(1) Points
(1) Points
           A loop (*)
           A CASE statement
           IF ... END IF;
           A Boolean variable.
(1) Points
           True (*)
           False
Incorrect Incorrect. Refer to Section 4.
2. In a FOR loop, an explicitly declared counter is automatically incremented by 1 for each iteration of the loop. True or False? Mark for Review
(1) Points
           True
           False (*)
                                 Incorrect. Refer to Section 4.
Incorrect
```

```
PLSQL feedback final exam semister 1
3.
        Look at this code fragment:
FOR i IN 1 .. 3 LOOP
i := 4;
DBMS_OUTPUT.PUT_LINE('The counter is: ' || i);
END LOOP;
How many lines of output will be displayed?
       Mark for Review
(1) Points
        One
        Three
        Four
        The block will fail because you cannot change the value of i inside the
loop. (*)
                        Incorrect. Refer to Section 4.
        Which statement best describes when a FOR loop should be used? Mark for
Review
(1) Points
        When an EXIT WHEN statement must be coded.
        When an implicitly declared counter must increase by 1 in each iteration of
the loop. (*)
        When we want to exit from the loop when a Boolean variable becomes FALSE.
        When the statements inside the loop must execute at least once.
                        Incorrect. Refer to Section 4.
Incorrect
        You want a loop that counts backwards from 10 through 1. How do you code
that?
       Mark for Review
(1) Points
        FOR i IN 10 .. 1 LOOP
        FOR i IN 1 .. 10 BY -1 LOOP
        FOR i IN REVERSE 1 .. 10 LOOP (*)
        FOR i IN REVERSE 10 .. 1 LOOP
```

```
Incorrect. Refer to Section 4.
Incorrect
       Look at the following code fragment:
i := 2;
WHILE i < 3 LOOP
i := 4:
DBMS_OUTPUT.PUT_LINE('The counter is: ' || i);
END LOOP;
How many lines of output will be displayed?
        Mark for Review
(1) Points
        No lines
        One line (*)
        Two lines
        The block will fail because you cannot use DBMS_OUTPUT.PUT_LINE inside a
loop.
                         Incorrect. Refer to Section 4.
        Look at the following block:
DECLARE
v_date DATE := SYSDATE;
BEGIN
WHILE v_date < LAST_DAY(v_date) LOOP
v_date := v_date + 1;
END LOOP;
DBMS_OUTPUT.PUT_LINE(v_date);
END;
If today's date is 17th April 2007, what will be displayed when this block executes?
        Mark for Review
(1) Points
        01-MAY-07
        31-DEC-07
        4/30/2007 (*)
        4/17/2007
Correct
                Correct
        You should use a WHILE loop when the number of iterations of the loop is
```

Mark for Review

Page 186

known in advance. True or False?

```
PLSQL feedback final exam semister 1
(1) Points
         True
         False (*)
Correct
                  Correct
        Which one of these statements about using nested loops is true?
                                                                                           Mark
for Review
(1) Points
         All the loops must be labelled
         The outer loop must be labelled, but the inner loop need not be labelled
The outer loop must be labelled if you want to exit the outer loop from within the inner loop (\mbox{\ensuremath{^{*}}}\mbox{\ensuremath{^{*}}}\mbox{\ensuremath{^{*}}}
         Both loops can have the same label
Correct
                  Correct
         When the following code is executed, how many lines of output will be
displayed?
BEGIN
FOR i IN 1..5 LOOP
FOR j IN 1..8 LOOP
DBMS_OUTPUT.PUT_LINE(i || ',' || j);
END LOOP;
DBMS_OUTPUT.PUT_LINE(i);
END LOOP;
END;
         Mark for Review
(1) Points
         80
         45 (*)
         14
         41
Correct
         what will be displayed when the following block is executed?:
```

**DECLARE** 

```
PLSQL feedback final exam semister 1
x \text{ NUMBER}(6) := 0 ;
BEGIN
FOR i IN 1..10 LOOP
FOR j IN 1..5 LOOP
x := x+1;
END LOOP;
END LOOP;
DBMS_OUTPUT.PUT_LINE(x);
END;
        Mark for Review
(1) Points
         5
         10
         15
         50 (*)
                           Incorrect. Refer to Section 4.
Incorrect
        Look at the following code:
DECLARE
v_blue NUMBER(3) := 0;
v_red NUMBER(3) := 0;
BEGIN
<<bld><<br/>blue>> LOOP
v_blue := v_blue + 1;
EXIT WHEN v_blue > 10;
<<red>> LOOP
v_red := v_red + 1;
EXIT WHEN v_{red} > 10;
-- Line A
END LOOP red;
END LOOP blue;
END;
What should you code at Line A to exit from the outer loop?

Mark for Review
(1) Points
         EXIT;
         EXIT red;
         EXIT <<blue>>;
         EXIT blue; (*)
                           Incorrect. Refer to Section 4.
Incorrect
```

```
PLSQL feedback final exam semister 1

1. What is wrong with the following code?

DECLARE
CURSOR emp curs IS SELECT last name salary FROM employees:
```

CURSOR emp\_curs IS SELECT last\_name, salary FROM employees; v\_last\_name employees.last\_name%TYPE; v\_salary employees.salary%TYPE; BEGIN
FETCH emp\_curs INTO v\_last\_name, v\_salary; OPEN emp\_curs; FETCH emp\_curs INTO v\_last\_name, v\_salary; CLOSE emp\_curs; END;

Mark for Review

### (1) Points

When FETCHing more than one row, you MUST use a loop.

The cursor declaration does not include a WHERE condition.

The cursor declaration does not include an INTO clause.

The first row is FETCHed before the cursor is OPENed. (\*)

Incorrect Incorrect. Refer to Section 5.

2. Which of the following best describes the difference between implicit and explicit cursors? Mark for Review
(1) Points

Implicit cursors are used for SELECT statements, while explicit cursors are used for DML statements.

Implicit cursor are named by the PL/SQL programmer, while explicit cursors are always named SQL.

Implicit cursors are defined automatically by Oracle, while explicit cursors must be declared by the PL/SQL programmer. (\*)

Implicit cursors store rows on disk, while explicit cursors store rows in memory.

Correct Correct
3. There are 8 countries in REGION\_ID 13 (Central America). What will happen when the following code is executed?

DECLARE
CURSOR country\_curs IS SELECT country\_name FROM wf\_countries
WHERE region\_id = 13;
v\_country\_name wf\_countries.country\_name%TYPE;
BEGIN
OPEN country\_curs;

```
PLSQL feedback final exam semister 1
WHILE country_curs%FOUND
L00P
FETCH country_curs INTO v_country_name;
DBMS_OUTPUT.PUT_LINE(v_country_name);
END LOOP;
CLOSE country_curs;
END;
        Mark for Review
(1) Points
        Eight rows will be fetched and displayed successfully.
        The last seven rows will be fetched and displayed.
        The block will execute, but no rows will be displayed. (*)
        The block will fail because you can not use a WHILE loop with an explicit
cursor.
        None of the above.
                          Incorrect. Refer to Section 5.
Incorrect
        You execute the following code:
DECLARE
CURSOR emp_curs IS SELECT last_name FROM employees;
v_last_name employees.last_name%TYPE;
OPEN emp_curs;
LOOP -- Point A
FETCH emp_curs INTO v_last_name;
EXIT WHEN emp_curs%NOTFOUND;
DBMS_OUTPUT.PUT_LINE(v_last_name);
END LOOP;
CLOSE emp_curs;
END;
At Point A (after you have OPENed the cursor) another user updates an employee's last_name from 'Smith' to 'Jones' and immediately COMMITS.
When your block FETCHes this row, which value will be fetched and displayed?
        Mark for Review
(1) Points
        1
        Smith (*)
        Jones
        Smith and Jones (the row will be fetched twice)
                                         Page 190
```

An INVALID\_CURSOR exception will be raised when you try to FETCH the row.

```
Incorrect. Refer to Section 5.
Incorrect
       What is wrong with the following code?
DECLARE
CURSOR dept_curs IS SELECT department_name FROM departments;
v_dept_name departments.department_name%TYPE;
BEGIN
OPEN dept_curs;
L00P
FETCH dept_curs INTO v_dept_name;
EXIT WHEN dept_curs%NOTFOUND;
DBMS_OUTPUT.PUT_LINE(v_dept_name);
CLOSE dept_curs;
END LOOP;
END;
        Mark for Review
(1) Points
        Nothing is wrong, all the rows will be FETCHed and displayed.
        The OPEN statement should be inside the loop.
        The EXIT WHEN ... statement should be coded outside the loop.
        The CLOSE statement should be coded after END LOOP; (*)
        The loop should be a WHILE loop, not a basic loop.
Correct
                Correct
                                                                 Mark for Review
         when must you declare and use an explicit cursor?
(1) Points
        You need to UPDATE more than one row in a table.
        You want to use a MERGE statement.
        You need to SELECT more than one row from a table. (*)
        You want to be able to ROLLBACK a transaction if needed.
Correct
                Correct
        which one of the following statements is NOT true?
                                                                 Mark for Review
```

Page 191

(1) Points

You can use ORDER BY when declaring an explicit cursor.

You can not use an INTO clause when declaring an explicit cursor.

An explicit cursor can select from only one table. No joins are allowed. (\*)

An explicit cursor must be DECLAREd before it can be OPENed.

Correct Correct 8. You cannot OPEN or CLOSE an implicit cursor. Why not? Mark for Review (1) Points

Because an implicit cursor is always called SQL.

Because an implicit cursor is OPENed and CLOSEd automatically by Oracle. (\*)

Correct Correct
9. Examine the following code:

DECLARE
CURSOR dept\_curs IS SELECT department\_name FROM departments;
v\_dept\_name departments.department\_name%TYPE;
BEGIN
OPEN dept\_curs;
LOOP
FETCH dept\_curs INTO v\_dept\_name;
DBMS\_OUTPUT.PUT\_LINE(v\_dept\_name);
EXIT WHEN dept\_curs%NOTFOUND;
END LOOP;
CLOSE dept\_curs;
END;

There are 10 rows in the DEPARTMENTS table. What will happen when this code is executed?

Mark for Review

(1) Points

10 rows will be displayed.

10 rows will be displayed, followed by a row of NULL values.

The last row will be displayed twice. (\*)

A NO\_DATA\_FOUND exception will be raised.

The loop will execute for ever; the same 10 rows will be displayed over and over again.

Incorrect Incorrect. Refer to Section 5
10. You have declared a cursor EMP\_CURSOR to select many rows from the EMPLOYEES table. The following five statements will be in the executable section:

- A. FETCH emp\_cursor INTO v\_empno,v\_last\_name;
- B. OPEN emp\_cursor;
- C. END LOOP;
- D. CLOSE emp\_cursor;
- E. LOOP

In which order should you code these statements?

Mark for Review

(1) Points

B, E, A, C, D (\*)

E, B, A, C, D

B, E, A, D, C

B, A, E, D, C

SELECT ... FROM employees WHERE last\_name = 'Grant';

Which type of cursor should you use, and why?

Mark for Review

(1) Points

An implicit cursor, because there is only one 'Grant'.

An implicit cursor, because SELECT is a SQL statement and implicit cursors are always called "SQL".

An explicit cursor, because there could be more than one 'Grant' in the future. (\*)

An explicit cursor, because you can use an implicit cursor only for DML statements.

Correct Correct
2. Which one of the following explicit cursor declarations is NOT valid? Mark for Review
(1) Points

```
PLSQL feedback final exam semister 1
```

```
CURSOR country_curs IS
SELECT country_name, region_name FROM wf_countries c, wf_world_regions r
WHERE c.region_id = r.region_id;
        CURSOR country_curs IS
SELECT country_name INTO v_country_name
FROM wf_countries;
(*)
        CURSOR country_curs IS
SELECT country_name
FROM wf_countries
ORDER BY population DESC;
        CURSOR country_curs IS
SELECT country_name
FROM wf_countries
WHERE region_id IN
(SELECT region_id FROM wf_world_regions
WHERE LOWER(region_name) LIKE '%asia%');
                         Incorrect. Refer to Section 5.
Incorrect
 1.
        Examine the following code:
DECLARE
CURSOR country_curs IS
SELECT country_id, country_name
FROM wf_countries
ORDER BY country_name;
v_country country_curs%ROWTYPE;
BEGIN
OPEN country_curs;
L00P
FETCH country_curs INTO v_country;
EXIT WHEN country_curs%NOTFOUND;
----- Line A
END LOOP;
CLOSE country_curs;
END;
You want to display the id and name of each FETCHed country. What would you code at
Line A?
        Mark for Review
(1) Points
        DBMS_OUTPUT.PUT_LINE(country_id || ' ' || country_name);
        DBMS_OUTPUT.PUT_LINE(v_country(country_id) || ' ' ||
v_country(country_name));
```

```
PLSQL feedback final exam semister 1
        DBMS_OUTPUT.PUT_LINE(country_curs.country_id || ' ' ||
country_curs.country_name);
        DBMS_OUTPUT.PUT_LINE(v_country.country_id || ' ' || v_country.country_name);
(*)
        Incorrect. Refer to Section 5.
How must you reference one field which is part of a PL/SQL record?
Incorrect
                                                                                      Mark
for Review
(1) Points
        field_name.record_name
        record_name.field_name (*)
        record_name(field_name)
        field_name OF record_name
        It cannot be done.
                         Incorrect. Refer to Section 5.
Incorrect
       You have declared the following cursor:
CURSOR country_curs IS SELECT * FROM wf_countries
ORDER BY country_name;
There are over 200 rows in the WF_COUNTRIES table, but you want to fetch and display
only the first 25 rows.
How would you exit from the FETCH loop?
        Mark for Review
(1) Points
        EXIT WHEN country_curs%FOUND(25);
        EXIT WHEN country_curs%ROWCOUNT > 25; (*)
        EXIT WHEN ROWCOUNT > 25;
        WHEN country_curs > 25 THEN EXIT; END IF;
Incorrect
                         Incorrect. Refer to Section 5.
        Look at these declarations:
```

```
PLSQL feedback final exam semister 1
DECLARE
CURSOR dept_loc_cursor IS
SELECT department_id, department_name, location_name FROM departments d, locations l WHERE d.location_id = l.location_id; v_dept_loc dept_loc_cursor%ROWTYPE;
How many fields does V_DEPT_LOC contain?
         Mark for Review
(1) Points
         Two, because the cursor joins two tables
         Four
         Three (*)
         None
Correct
                   Correct
          Look at the following code:
DECLARE
CURSOR emp_cursor IS
SELECT employee_id, last_name, salary FROM employees;
v_empcurs emp_cursor%ROWTYPE;
what is the data type of V_EMPCURS?
         Mark for Review
(1) Points
         Scalar
         Record (*)
         Cursor
         Row
                            Incorrect. Refer to Section 5.
         Which of the following explicit cursor attributes evaluates to TRUE if the
most recent FETCH returns a row?
                                               Mark for Review
(1) Points
         %ISOPEN
         %NOTFOUND
```

```
%ROWCOUNT
                      Incorrect. Refer to Section 5.
Incorrect
       You can reference explicit cursor attributes directly in a SQL statement.
True or False? Mark for Review
(1) Points
       True
       False (*)
                      Incorrect. Refer to Section 5.
Incorrect
       What is the DISadvantage of using a cursor FOR loop with a subquery?
                                                                            Mark
for Review
(1) Points
       You cannot reference cursor attributes such as %NOTFOUND. (*)
       The execution speed is slower.
       You cannot declare the cursor in the declaration section.
       You cannot use the cursor to join two or more tables.
       There are no disadvantages.
How should you code a FOR loop to use this cursor?
       Mark for Review
(1) Points
       FOR loc_rec IN 1 .. loc_curs%ROWCOUNT LOOP ...
       WHILE loc_rec IN loc_curs LOOP ...
       FOR loc_curs IN loc_rec LOOP ...
       IF loc_rec IN loc_curs LOOP ...
                                    Page 197
```

%FOUND (\*)

```
PLSQL feedback final exam semister 1
        FOR loc_rec IN loc_curs LOOP ... (*)
3.
        what is wrong with the following piece of code?
BEGIN
FOR emp_record IN emp_cursor LOOP
DBMS_OUTPUT.PUT_LINE(emp_record.last_name);
IF emp_record.last_name = 'Patel' THEN ...
        Mark for Review
(1) Points
        EMP_RECORD has not been explicitly declared.
        The cursor has not been OPENed.
        You cannot reference EMP_RECORD outside the loop. (*)
        It should read: DBMS_OUTPUT.PUT_LINE(emp_cursor.last_name);
        Nothing is wrong, the code will execute correctly.
                        Incorrect. Refer to Section 5
Incorrect
        Which of the following is a benefit of using a cursor FOR loop?
                                                                                 Mark
for Review
(1) Points
        The exception handling is done automatically. .
        The OPEN, CLOSE, FETCH and EXIT from the loop are done automatically. (*)
        You can OPEN the same cursor twice at the same time.
        Because there is less code, the loop executes faster.
        %ROWCOUNT increments automatically each time a row is FETCHed.
                        Incorrect. Refer to Section 5
        Which one of the following is a valid cursor FOR loop with a subquery? Mark
for Review
(1) Points
        FOR emp_rec IN (SELECT last_name || first_name FROM employees) LOOP ...
        FOR emp_rec IN (SELECT UPPER(last_name) FROM employees) LOOP ...
                                      Page 198
```

```
PLSQL feedback final exam semister 1
         FOR emp_rec IN SELECT last_name, salary*12 "ANNSAL" FROM employees LOOP ...
         FOR emp_rec IN (SELECT last_name, salary*12 "ANNSAL" FROM employees) LOOP
... (*)
         None of the above.
Incorrect
                          Incorrect, Refer to Section 5
        Look at the following code:
DECLARE
CURSOR emp_cursor IS SELECT * FROM employees;
FOR emp_record IN emp_cursor LOOP
DBMS_OUTPUT.PUT_LINE( --Point A -- );
END LOOP;
END;
To display the salary of an employee, what code should you write at Point A?
        Mark for Review
(1) Points
         emp_record.salary (*)
         emp_cursor.salary
         employees.salary
         emp_record.employees.salary
        TO_CHAR(salary)
                          Incorrect. Refer to Section 5
        The following cursor has been declared:
CURSOR emp_curs
(p_dept_id employees.department_id%TYPE,
p_job_id employees.job_id%TYPE) IS
SELECT * FROM employees
WHERE department_id = p_dept_id
AND job_id = p_job_id;
Which of the following will correctly open the cursor?
        Mark for Review
(1) Points
        OPEN emp_curs(20);
         FOR emp_rec IN emp_curs(20) LOOP ...
                                          Page 199
```

```
OPEN emp_curs('IT_PROG', 20);
        FOR emp_rec IN emp_curs(20, 'IT_PROG') LOOP ... (*)
        FOR emp_rec IN emp_curs(p_dept_id p_job_id) LOOP ...
Incorrect
                          Incorrect, Refer to Section 5
        Look at the following code:
2.
DECLARE
CURSOR emp_curs (p_dept_id employees.department_id%TYPE) IS
SELECT * FROM employees
WHERE department_id = p_dept_id;
v_emp_rec emp_curs%ROWTYPE;
v_deptid NUMBER(4) := 50;
OPEN emp_curs( -- Point A --);
You want to open the cursor, passing value 50 to the parameter. Which of the
following are correct at Point A?
        Mark for Review
(1) Points
        50
        v_deptid
        100 / 2
        All of the above. (*)
                          Incorrect. Refer to Section 5.
3. Using parameters with a cursor, you can open and close the cursor several times in a block, returning a different active set each time. True or False?
for Review
(1) Points
        True (*)
        False
Incorrect
                          Incorrect. Refer to Section 5.
        You want to use explicit cursors to fetch and display all the countries in a
specific region. There are 19 rows in the WF_WORLD_REGIONS table. You want to use a
different region each time the cursor is opened. How many cursors should you
                 Mark for Review
declare?
```

PLSQL feedback final exam semister 1

```
PLSQL feedback final exam semister 1
        19 cursors, all in the same PL/SQL block.
        19 cursors in 19 PL/SQL blocks (one in each block).
        20 cursors, in case an extra row is inserted into WF_WORLD_REGIONS later.
        One cursor with a parameter in the WHERE clause. (*)
        None of the above.
                        Incorrect. Refer to Section 5.
       What is wrong with the following cursor declaration?
CURSOR dept_curs (p_loc_id NUMBER(4)) IS
SELECT * FROM departments
WHERE location_id = p_loc_id;
       Mark for Review
        You cannot reference a cursor parameter in a WHERE clause.
        The parameter should be coded as: (p_loc_id NUMBER) (*)
        The parameter should be coded as: (p_loc_id IN NUMBER)
        Nothing is wrong, the cursor declaration is correct.
                        Incorrect. Refer to Section 5.
        What is the difference between the following two blocks of code?
    CURSOR emp_cursor IS
    SELECT employee_id, last_name
   WHERE department_id = 80
    FOR UPDATE OF salary;
```

(1) Points

Incorrect

(1) Points

Incorrect

--Block A **DECLARE** 

--вlock в **DECLARE** 

FROM employees

FROM employees

NOWAIT;

(1) Points

CURSOR emp\_cursor IS

WHERE department\_id = 80 FOR UPDATE OF salary

Mark for Review

SELECT employee\_id, last\_name

There is no difference; the programs behave exactly the same way.

In Block A, the program waits indefinitely until the rows are available. In Block B, the program returns control immediately so that it can do other work. (\*)

In Block A, the program waits indefinitely until the rows are available. In Block B, control is returned to your program after 5 seconds so that it can do other work.

Correct Correct

2. You have declared a cursor as SELECT .... FOR UPDATE; You have OPENed the cursor and locked the FETCHed rows. When are these row locks released? Mark for Review

(1) Points

When an UPDATE ... WHERE CURRENT OF cursor\_name; is executed.

When you CLOSE the cursor.

When your block finishes executing.

when you explicitly COMMIT or ROLLBACK your transaction. (\*)

when another user tries to SELECT the rows.

Incorrect Incorrect. Refer to Section 5.

3. You want to fetch rows from the EMPLOYEES table. You want to lock the fetched rows, to prevent other users from updating them. You declare the following cursor:

CURSOR emp\_curs IS
SELECT employee\_id, last\_name, salary
FROM employees
-- Line A -- ;

What should you code at Line A?

Mark for Review
(1) Points

FOR LOCK

FOR UPDATE OF employees

FOR UPDATE (\*)

FOR UPDATE (employees)

Correct Correct You have declared the following cursor: CURSOR country\_curs IS SELECT country\_id, country\_name FROM wf\_countries FOR UPDATE WAIT 10; Another user updates a row in WF\_COUNTRIES but does not COMMIT the update. What will happen when you OPEN country\_curs; ?
Mark for Review (1) Points A LOCKED\_ROWS exception is raised immediately. The other user's transaction is automatically rolled back. Your session waits indefinitely until the other user COMMITS. Your session waits for 10 seconds, and then returns control to your block so that it can continue to execute. (\*) Your block fails because you should have coded: FOR UPDATE WAIT (10); Correct Correct Why can we NOT code: INSERT INTÓ table-name WHERE CURRENT OF cursor\_name; Mark for Review (1) Points Because the syntax is wrong. An INSERT statement must have a VALUES ( .... ) clause. Because the syntax is wrong. It should be: INSERT INTO cursor-name .... WHERE CURRENT OF table-name; Because WHERE CURRENT OF ... modifies the most recently FETCHed row, and you cannot FETCH a row that is not in the table yet. (\*) Because another user has locked the rows and not committed. Nothing is wrong; we CAN code: INSERT .... WHERE CURRENT OF ...; Incorrect. Refer to Section 5. Incorrect

Page 203

When can we use the WHERE CURRENT OF clause?

Mark for Review

```
PLSQL feedback final exam semister 1
```

### (1) Points

Only with an UPDATE, not with a DELETE.

Only with a DELETE, not with an UPDATE.

when the cursor is declared as SELECT ... FOR UPDATE ...; (\*)

when the cursor is based on a single table (not on a join).

When the cursor has not been OPENed.

Correct Correct
7. You declare a cursor as a join of two tables:

CURSOR emp\_dept\_curs IS
SELECT last\_name, salary, department\_name
FROM employees e, departments d
WHERE e.department\_id = d.department\_id
-- Point A -- ;

You want to lock fetched rows from EMPLOYEES, but NOT lock fetched rows from DEPARTMENTS.

Which of the following is correct at Point A?

Mark for Review

(1) Points

FOR UPDATE

FOR UPDATE of salary (\*)

FOR UPDATE OF employees

FOR UPDATE (last\_name)

You cannot use cursor FOR loops.

You cannot declare the cursors FOR UPDATE.

You cannot declare a cursor based on a join.

You cannot OPEN more than one cursor at the same time.

None of the above, they are all allowed. (\*)

Incorrect Incorrect. Refer to Section 5.

2. Which of the following is a good reason to use two cursors in a single PL/SQL block? Mark for Review
(1) Points

To allow one cursor to be opened twice at the same time.

When two tables are related to each other (often by a foreign key) and we want to produce a multilevel report using data from both tables. (\*)

To allow rows to be locked as they are FETCHed.

To speed up the execution of the PL/SQL block.

It is the only way to declare a cursor with a parameter.

Incorrect Incorrect. Refer to Section 5.

3. Assume your schema contains 25 tables. How many explicit cursors can you declare and use within a single PL/SQL block? Mark for Review
(1) Points

Only one.

As many as you need - there is no limit. (\*)

A maximum of three.

As many as you need, but only one of them can be open at any time.

A maximum of 25 (one for each table in your schema).

Incorrect Incorrect. Refer to Section 5.

4. Assume that table BIGDEPTS contains 100 rows, and table BIGEMPS contains 1000 rows, with 10 employees in each department. Consider the following code:

DECLARE
CURSOR bigdept\_cur IS
SELECT \* FROM bigdepts;
CURSOR bigemp\_cur IS
SELECT \* FROM bigemps;
BEGIN

PLSQL feedback final exam semister 1 FOR dept\_rec IN bigdept\_cur LOOP DBMS\_OUTPUT.PUT\_LINE (dept\_rec.department\_name);
FOR emp\_rec IN bigemp\_cur LOOP
IF emp\_rec.department\_id=dept\_rec.department\_id
THEN DBMS\_OUTPUT.PUT\_LINE (emp\_rec.last\_name); END IF: END LOOP; END LOOP; END; Why is this code inefficient? Mark for Review (1) Points It locks both tables unnecessarily. It is using two cursors when one cursor is enough. It is doing a Cartesian Product, joining every employee with every department and displaying 1100 lines of output. It reads 1000 employee rows every time BIGEMP\_CUR is OPENed, and then ignores 990 of them. (\*) It is using cursor FOR loops, which are less efficient than OPENing and CLOSEing the cursors explicitly. Incorrect. Refer to Section 5. Incorrect 5. You want to produce a report which displays each department and (immediately after each department) a list of employees who work in that department. You declare a DEPARTMENTS cursor as: CURSOR dept\_curs IS SELECT \* FROM departments ORDER BY department\_id: How could you declare the EMPLOYEES cursor? (Choose two). Mark for Review (1) Points (Choose all correct answers) CURSOR emp\_curs IS SELECT \* FROM employees; CURSOR emp\_curs (p\_dept\_id NUMBER) IS SELECT \* FROM employees WHERE department\_id = p\_dept\_id; (\*) CURSOR emp\_curs IS SELECT \* FROM employees ORDER BY department\_id;

```
PLSQL feedback final exam semister 1
        CURSOR emp_curs (p_dept_id departments.department_id%TYPE) IS SELECT * FROM
employees WHERE department_id = p_dept_id; (*)
        CURSOR emp_curs IS SELECT * FROM employees WHERE department_id =
departments.department_id;
                         Incorrect. Refer to Section 5.
Incorrect
        Examine the following code:
DECLARE
CURSOR region_cur IS
SELECT * FROM wf_world_regions;
v_region_rec region_cur%ROWTYPE;
CURSOR country_cur (p_region_id NUMBER) IS
SELECT * FROM wf_countries
WHERE region_id = p_region_id;
v_country_rec country_cur%ROWTYPE;
BEGIN
OPEN region_cur;
L00P
FETCH region_cur INTO v_region_rec;
EXIT WHEN region_cur%NOTFOUND;
DBMS_OUTPUT.PUT_LINE
(v_region_rec.region_name);
-- Line A --
LOOP
FETCH country_cur INTO v_country_rec;
EXIT WHEN country_cur%NOTFOUND;
What would you code at Line A?
        Mark for Review
(1) Points
        OPEN country_cur (p_region_id);
        OPEN country_cur (wf_world_regions.region_id);
        OPEN country_cur (v_region_rec.region_id); (*)
        OPEN country_cur (region_cur.region_id);
        OPEN country_cur;
Correct
                Correct
        Errors are handled in the Exception part of the PL/SQL block. True or False?
        Mark for Review
(1) Points
        True (*)
```

False

Incorrect Incorrect. Refer to Section 1.

In which part of the PL/SQL block are declarations of variables defined? Mark for Review

(1) Points

Executable |

Exception

Declarative (\*)

Definition

Incorrect. Refer to Section 1. Incorrect

which of the following tools can NOT be used to develop and test PL/SQL code? (1) Points Mark for Review

Oracle Jdeveloper

Oracle Application Express

oracle JSQL (\*)

Oracle iSQL\*Plus

Incorrect Incorrect. Refer to Section 1.

4. Which component of Oracle Application Express is used to enter and run SQL statements and PL/SQL blocks? Mark for Review

(1) Points

Application Builder

SQL Workshop (\*)

Utilities

Incorrect

Incorrect. Refer to Section 1.

5. Which PL/SQL block type must return a value? Mark for Review (1) Points

Anonymous

Function (\*)

Procedure

Correct Correct

6. Given below are the parts of a PL/SQL block:

- 1. END;
- 2. EXCÉPTION
- 3. DECLARE
- 4. BEGIN

Arrange the parts in order.
Mark for Review

(1) Points

2,1,4,3

3,4,2,1 (\*)

3,2,4,1

4,3,2,1

Incorrect. Refer to Section 1.

7. What is the purpose of using DBMS\_OUTPUT.PUT\_LINE in a PL/SQL block? Mark for Review (1) Points

To perform conditional tests

To allow a set of statements to be executed repeatedly

To display results to check if our code is working correctly (\*)

To store new rows in the database

Incorrect. Refer to Section 1.

8. Which of the following can you use PL/SQL to do? Mark for Review (1) Points

Update data (DML)

Develop Web applications using the Web Application Toolkit

Manage database security

Create customized reports

All of the above (\*)

Incorrect. Refer to Section 1.

9. PL/SQL can be used not only with an Oracle database, but also with any kind of relational database. True or False? Mark for Review (1) Points

True

False (\*)

Correct Correct

10. The fact that PL/SQL is portable is a good thing because: Mark for Review (1) Points

Exceptions can be ported to different operating systems

Blocks can be sent to the operating system.

PL/SQL code can be developed on one platform and deployed on another (\*)

PL/SQL code can be run on any operating system without a database

Correct Correct
11. PL/SQL extends SQL by including all of the following except: Mark for Review
(1) Points

variables

conditional statements

reusable program units

constants

nonprocedural constructs (\*)

Incorrect Incorrect. Refer to Section 1.

12. Which of the following statements about PL/SQL and SQL is true? Mark for Review (1) Points

PL/SQL and SQL are both ANSI-compliant.

PL/SQL and SQL can be used with many types of databases, including Oracle.

PL/SQL and SQL are both Oracle proprietary programming languages.

 $\,$  PL/SQL allows basic program logic and control flow to be combined with SQL statements. (\*)

Incorrect. Refer to Section 1.

13. A program which specifies a list of operations to be performed sequentially to achieve the desired result can be called: Mark for Review (1) Points

declarative

nondeclarative

```
PLSQL feedback final exam semister 1
        procedural (*)
        low level
                        Incorrect. Refer to Section 1.
Incorrect
        Section 2
                14.
                      A variable must have a value if NOT NULL is specified. True
                Mark for Review
or False?
(1) Points
       True (*)
        False
Incorrect
                        Incorrect. Refer to Section 2.
                15.
                        which of the following declarations is invalid?
                                                                                 Mark
for Review (1) Points
        v_count PLS_INTEGER:=0;
        college_name VARCHAR2(20):='Harvard';
        v_pages CONSTANT NUMBER; (*)
        v_start_date DATE := sysdate+1;
Correct
                Correct
                        which of the following should NOT be used as the name of a
                16.
                Mark for Review
variable?
(1) Points
        A table name.
        A table column name. (*)
        The database name.
```

Correct Correct

17. When nested blocks are used, which blocks can or must be labeled? Mark for Review
(1) Points

The inner block must be labeled, the outer block can be labeled.

Both blocks must be labeled

Nested blocks cannot be labeled

The outer block must be labeled if it is to be referred to in the inner block. (\*)

Incorrect. Refer to Section 2.

18. When an exception occurs within a PL/SQL block, the remaining statements in the executable section of the block are skipped. True or False? Mark for Review (1) Points

True (\*)

False

Incorrect. Refer to Section 2.

19. Examine the following code. At Line A, we want to assign a value of 22 to the outer block's variable  $v_myvar$ . What code should we write at Line A?

```
<<outer_block>>
DECLARE
    v_myvar NUMBER;
BEGIN
    <<inner_block>>
    DECLARE
        v_myvar NUMBER := 15;
    BEGIN
        -- Line A
    END;
END;
END;
Mark for Review
(1) Points
```

```
PLSQL feedback final exam semister 1
```

```
v_myvar := 22;
        <<outer_block>>.v_myvar := 22;
        v_myvar(outer_block) := 22;
        We cannot reference the outer block's variable because both variables have
the same name
                         Incorrect. Refer to Section 2.
Incorrect
                        Examine the following code. Line A causes an exception. What
                20.
will be displayed when the block is executed?
DECLARE
    var_a NUMBER := 6;
    var_b DATE;
BEGIN
    var_a := var_a * 2;
var_b := '28 December 2006'; -- Line A
    var_a := var_a * 2;
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE(var_a);
END;
        Mark for Review
(1) Points
        12 (*)
        24
        6
        Nothing will be displayed
                         Incorrect. Refer to Section 2.
Incorrect
        what will be displayed when the following code is executed?
21.
DECLARE
    varA NUMBER := 12;
BEGIN
    DECLARE
       varB NUMBER := 8;
    BEGIN
       varA := varA + varB;
    END:
    DBMS_OUTPUT.PUT_LINE(varB);
END;
```

```
PLSQL feedback final exam semister 1
        Mark for Review
(1) Points
        8
        12
        Nothing, the block will fail with an error (*)
        20
        VarB
Incorrect
                         Incorrect. Refer to Section 2.
                 22.
                         which of the following are valid assignment statements?
(Choose two.)
                 Mark for Review
(1) Points
                         (Choose all correct answers)
        v_string = 'Hello';
        v_string := Hello;
        v_number := 17 + 34; (*)
        v_string := 'Hello'; (*)
        v_date := 28-DEC-06;
Incorrect
                         Incorrect. Refer to Section 2.
                 23.
                         Examine the following code. What is the final value of
V_MYBOOL ?
DECLARE
    v_mynumber NUMBER;
    v_mybool BOOLEAN;
    v_mynumber := 6;
    v_mybool := (v_mynumber BETWEEN 10 AND 20);
v_mybool := NOT (v_mybool);
        Mark for Review
(1) Points
```

```
True (*)
        False
                         Incorrect. Refer to Section 2.
Incorrect
                         Examine the following code:
                 24.
1 DECLARE
\frac{1}{2} x NUMBER;
3 BEGIN
4 x := '300';
5 END;
After line 4, what is the value of x?
Mark for Review
(1) Points
        '300'
        300 (*)
        NULL
Correct
                 Correct
                         The implicit data type conversion at Point A may not work
                 25.
correctly. Why not?
DECLARE
    v_mydate DATE;
BEGIN
    V_MYDATE := '29-Feb-04'; -- Point A
        Mark for Review
(1) Points
        There are only 28 days in February
        Oracle cannot implicitly convert a character string to a date, even if the
string contains a valid date value
        If the database language is not English, 'Feb' has no meaning. (*)
        V_MYDATE has been entered in uppercase
```

PLSQL feedback final exam semister 1 Incorrect. Refer to Section 2.

Incorrect

PL/SQL can convert a VARCHAR2 value containing alphabetic value. True or False? Mark for Review characters to a NUMBER value. True or False? (1) Points

True

False (\*)

Correct Correct

The DECODE function is available in PL/SQL procedural 27. Mark for Review statements. True or False? (1) Points

True

False (\*)

Incorrect. Refer to Section 2. Incorrect

What is wrong with this assignment statement?

'To be or not to be'; 'That is the question'; Mark for Review

(1) Points

An assignment statement must be a single line of code

Nothing is wrong, the statement is fine

An assignment statement must have a single semicolon at the end (\*)

"myvar" is not a valid name for a variable

Character literals should not be enclosed in quotes

Correct Correct

Single row character functions are valid SQL functions in PL/SQL. True or False? Mark for Review (1) Points

```
True (*)
        False
                         Incorrect. Refer to Section 2.
Incorrect
                         Which of the following are PL/SQL lexical units? (Choose
two.) Mark for Review
(1) Points
                          (Choose all correct answers)
        Identifiers (*)
        Table Columns
        Reserved Words (*)
        Anonymous Blocks
        SQL Workshop
       ect Incorrect. Refer to Section 2.
Valid identifiers begin with a Mark for Review
Incorrect
31.
(1) Points
        Number
        Letter (*)
        Special character
Incorrect
                          Incorrect. Refer to Section 2.
                         which of the following are valid identifiers? (Choose two.)
                 32.
Mark for Review
(1) Points
                          (Choose all correct answers)
```

Full Name

PLSQL feedback final exam semister 1 students\_street\_address (\*) v\_code (\*) #hours completion\_% Incorrect. Refer to Section 2. Incorrect 33. which statement most closely describes "data type"? Mark for Review (1) Points It is the value of a variable. It specifies a storage format, constraints, and a valid range of values for a variable. (\*) It allows different kinds of data to be stored in a single variable. It is used to test if errors have occurred. Correct Correct 34. \_\_\_\_\_ are meant to store large amounts of data. Mark for Review (1) Points variables Scalar data types LOBs (\*) Incorrect. Refer to Section 2. Incorrect 35. A movie is an example of which category of data type? for Review (1) Points Scalar Page 219

Composite

Reference

LOB (\*)

Incorrect

Incorrect. Refer to Section 2.

36. Assignment statements can continue over several lines in PL/SQL. True or False? Mark for Review (1) Points

True (\*)

False

Correct Correct

37. Variables can be assigned a value in both the Executable and Declaration sections of a PL/SQL program. True or False? Mark for Review (1) Points

True (\*)

False

Incorrect. Refer to Section 2.

38. When a variable is defined using the CONSTANT keyword, the value of the variable cannot change. True or False? Mark for Review (1) Points

True (\*)

False

Correct Correct

39. Identify which of the following assignment statements are valid. (Choose three.) Mark for Review (1) Points

```
PLSQL feedback final exam semister 1 (Choose all correct answers)
```

v\_last\_name := Chandra;

v\_blackout\_date := '31-DEC-2006'; (\*) v\_population := 333444; (\*) v\_music\_type := 'ROCK'; (\*) Incorrect. Refer to Section 2. Incorrect 40. When a variable is defined using the NOT NULL keywords, the variable must contain a value. True or False? Mark for Review (1) Points True (\*) False Correct 41. Which of the following best describes a database transaction? Mark for Review (1) Points All the DML statements in a single PL/SQL block A related set of SQL DML statements which must be executed either completely or not at all (\*) A single SQL statement that updates multiple rows of a table A SELECT statement based on a join of two or more database tables Correct Correct The following anonymous block of code is run: 42. **BEGIN** INSERT INTO countries (id, name)
VALUES ('XA', 'Xanadu');
SAVEPOINT XA; INSERT INTO countries (id, name)
VALUES ('NV','Neverland'); COMMIT; Page 221

ROLLBACK TO XA;

END;

What happens when the block of code finishes?

Mark for Review

(1) Points

No data is inserted and no errors occur.

No data is inserted and an error occurs

Two rows are inserted and no errors occur.

Two rows are inserted and an error occurs. (\*)

Incorrect. Refer to Section 3.

43. Which of the following is NOT a good guideline for retrieving data in PL/SQL? Mark for Review (1) Points

Declare the receiving variables using %TYPE

The WHERE clause is optional in nearly all cases. (\*)

Specify the same number of variables in the INTO clause as database columns in the SELECT clause.

THE SELECT statement should fetch exactly one row.

Incorrect Incorrect. Refer to Section 3.

44. Given this first section of code:

**DECLARE** 

v\_result employees.salary%TYPE;

BEGIN

Which statement will always return exactly one value?

Mark for Review

(1) Points

SELECT salary INTO v\_result FROM employees;

```
PLSQL feedback final exam semister 1
        SELECT salary
INTO v_result
FROM employees
WHERE last_name ='Smith';
        SELECT salary
INTO v_result
FROM employees
WHERE department_id = 80;
        SELECT SUM(salary)
INTO v_result
FROM employees;
(*)
                         Incorrect. Refer to Section 3.
Incorrect
                         which one of these SQL statements can be directly included
in a PL/SQL executable block?
                                  Mark for Review
(1) Points
SELECT last_name FROM employees
WHERE employee_id=100;
        DESCRIBE employees;
UPDATE employees
SET last_name='Smith';
(*)
        DROP TABLE employees;
Correct
                 Correct
                         A variable is declared as:
                 46.
DECLARE
    v_holdit employees.last_name%TYPE;
BEGIN ...
which of the following is a correct use of the INTO clause?
        Mark for Review
(1) Points
```

SELECT \*
INTO v\_holdit
FROM employees;

SELECT last\_name
INTO v\_holdit
FROM employees;

SELECT last\_name
INTO v\_holdit
FROM employees
WHERE employee\_id=100;

(\*)

SELECT salary INTO v\_holdit FROM employees WHERE employee\_id=100;

Incorrect. Refer to Section 3.

47. Which one of these SQL statements can be directly included in a PL/SQL executable block? Mark for Review (1) Points

DELETE FROM employees WHERE department\_id=60;

(\*)

SELECT salary FROM employees
WHERE department\_id=60;

CREATE TABLE new\_emps (last\_name VARCHAR2(10), first\_name VARCHAR2(10));

DROP TABLE locations;

Incorrect. Refer to Section 3.

48. You declare an implicit cursor in the DECLARE section of a PL/SQL block. True or False? Mark for Review (1) Points

True

False (\*)

Correct Correct

49. Which SQL statement can NOT use an implicit cursor? Mark for Review (1) Points

A DELETE statement

An UPDATE statement

A SELECT statement that returns multiple rows (\*)

A SELECT statement that returns one row

Correct Correct

50. A PL/SQL block includes the following statement:

SELECT last\_name INTO v\_last\_name FROM employees WHERE employee\_id=100;

What is the value of SQL%ISOPEN immediately after the SELECT statement is executed?

Mark for Review

(1) Points

True

False (\*)

Null

Error. That attribute does not apply for implicit cursors.

Incorrect Incorrect. Refer to Section 3.

1. Comparing PL/SQL with other languages such as C and Java, which of the following statements is true? Mark for Review
(1) Points

PL/SQL is harder to learn

PL/SQL is easier to learn and more efficient (\*)

PL/SQL is easier to learn but less efficient

PL/SQL is easier to learn and does not require an Oracle database or tool

Correct Correct

2. Using Oracle Application Express, you can create Web applications that include PL/SQL. True or False? Mark for Review (1) Points

True (\*)

False

Incorrect. Refer to Section 1.

3. Which of the following can you use PL/SQL to do? Mark for Review (1) Points

Update data (DML)

Develop Web applications using the Web Application Toolkit

Manage database security

Create customized reports

All of the above (\*)

Incorrect. Refer to Section 1.

4. A program which specifies a list of operations to be performed sequentially to achieve the desired result can be called: Mark for Review (1) Points

declarative

nondeclarative procedural (\*) low level Correct Correct 5. The P in PL/SQL stands for: Mark for Review (1) Points Processing Procedural (\*) Primary Proprietary Correct Correct 6. SQL is a common access language for many types of databases, including Oracle. True or False? Mark for Review
(1) Points True (\*) False Incorrect, Refer to Section 1. Incorrect 7. Every PL/SQL anonymous block must start with the keyword DECLARE. True or False? Mark for Review (1) Points True False (\*) Incorrect. Refer to Section 1. Incorrect

PLSQL feedback final exam semister 1

```
PLSQL feedback final exam semister 1 In which part of the PL/SQL block are declarations of
variables defined?
                         Mark for Review
(1) Points
        Executable
        Exception
        Declarative (*)
        Definition
Correct
                 Correct
                         Which statements are optional in a PL/SQL block? (Choose
two.) Mark for Review
(1) Points
                          (Choose all correct answers)
        DECLARE (*)
        BEGIN
        EXCEPTION (*)
        END;
Correct
                 Correct
10. Which lines cat sat on the mat"? (Choose two.)
                         which lines of code will correctly display the message "The
                                        Mark for Review
(1) Points
                          (Choose all correct answers)
        DBMS_OUTPUT.PUT_LINE('The cat sat on the mat'); (*)
        DBMS_OUTPUT.PUT_LINE(The cat sat on the mat);
        DBMS_OUTPUT.PUT_LINE('The cat' || 'sat on the mat');
        DBMS_OUTPUT.PUT_LINE('The cat sat ' || 'on the mat'); (*)
```

Incorrect Incorrect. Refer to Section 1.
11. Which of the following tools can NOT be used to develop and test PL/SQL code? Mark for Review
(1) Points

Oracle Jdeveloper

Oracle Application Express

oracle JSQL (\*)

Oracle iSQL\*Plus

Incorrect. Refer to Section 1.

12. What is the purpose of using DBMS\_OUTPUT.PUT\_LINE in a PL/SQL block? Mark for Review (1) Points

To perform conditional tests

To allow a set of statements to be executed repeatedly

To display results to check if our code is working correctly (\*)

To store new rows in the database

Correct Correct

13. Which PL/SQL block type must return a value? Mark for Review (1) Points

Anonymous

Function (\*)

Procedure

Incorrect. Refer to Section 1.

Section 2

1. Null 14.

- 2. False 3. True 4. 0

Which of the above can be assigned to a Boolean variable? Mark for Review

(1) Points

2 and 3

2, 3 and 4

1, 2 and 3 (\*)

1, 2, 3 and 4

Correct Correct

15. You need to declare a variable to hold a value which has been read from the SALARY column of the EMPLOYEES table. Which of the following is an advantage of declaring the variable as: employees.salary%TYPE? Mark for Review

(1) Points

It is shorter than coding NUMBER(8,2)

If the SALARY column is ALTERED later, the PL/SQL code need not be changed. (\*)

It executes much faster than using NUMBER(8,2)

It allows the software to perform implicit data type conversions.

Incorrect. Refer to Section 2. Incorrect

which of the following should NOT be used as the name of a variable? Mark for Review (1) Points

A table name.

A table column name. (\*)

 $\,$  PLSQL feedback final exam semister 1 The database name.

Correct Correct Delimiters are \_\_\_\_ that have special meaning to the Oracle database. Mark for Review (1) Points identifiers variables symbols (\*) Correct Correct which of the following are valid identifiers? (Choose two.) 18. Mark for Review (1) Points (Choose all correct answers) Full Name students\_street\_address (\*) v\_code (\*) #hours completion\_% Correct Correct which statements about lexical units are true? (Choose two.) Mark for Review (1) Points (Choose all correct answers)

Page 231

They are named objects stored in the database

They are the building blocks of every PL/SQL program (\*)

They are optional but can make a PL/SQL block execute faster

They are sequences of characters including letters, digits, tabs, returns and symbols (\*)

Correct Correct 20. What will be displayed when the following code is executed? **DECLARE** varA NUMBER := 12; **BEGIN DECLARE** varB NUMBER := 8; **BEGIN** varA := varA + varB; DBMS\_OUTPUT.PUT\_LINE(varB); END; Mark for Review (1) Points 8 12 Nothing, the block will fail with an error (\*) 20 VarB Correct When an exception occurs within a PL/SQL block, the remaining statements in 21. the executable section of the block are skipped. True or False? Mark for Review (1) Points True (\*) False

Correct Correct

22. When nested blocks are used, which blocks can or must be labeled? Mark for Review
Page 232

```
PLSQL feedback final exam semister 1
```

(1) Points

The inner block must be labeled, the outer block can be labeled.

Both blocks must be labeled

Nested blocks cannot be labeled

The outer block must be labeled if it is to be referred to in the inner block. (\*)

Correct Correct

```
23. In the following code, Line A causes an exception. What value will be displayed when the code is executed?

DECLARE

outer_var VARCHAR2(50) := 'My';

BEGIN

outer_var := outer_var || ' name';

DECLARE
```

inner\_var NUMBER;
BEGIN
 inner\_var := 'Mehmet'; -- Line A
 outer\_var := outer\_var || ' is';
END;

outer\_var := outer\_var || ' Zeynep'; EXCEPTION WHEN OTHERS THEN

DB

END;

DBMS\_OUTPUT.PUT\_LINE(outer\_var);

Mark for Review (1) Points

Му

My name (\*)

My name is

My name is Zeynep

Incorrect. Refer to Section 2.

24. Examine the following code. At Line A, we want to assign a value of 22 to the outer block's variable  $v_myvar$ . What code should we write at Line A?

<<outer\_block>>
DECLARE

```
PLSQL feedback final exam semister 1
    v_myvar NUMBER;
BEGIN
    <<inner_block>>
    DECLARE
       v_myvar NUMBER := 15;
    BEGIN
       -- Line A
    END;
END;
        Mark for Review
(1) Points
        outer_block.v_myvar := 22; (*)
        v_myvar := 22;
        <<outer_block>>.v_myvar := 22;
        v_myvar(outer_block) := 22;
        We cannot reference the outer block's variable because both variables have
the same name
Correct
                Correct
                25.
                        A collection is a composite data type. True or False?
for Review
(1) Points
        True (*)
        False
                        Incorrect. Refer to Section 2.
Incorrect
                        what is the data type of the variable V_DEPT_TABLE in the
following declaration?
DECLARE
TYPE dept_table_type IS TABLE OF departments%ROWTYPE INDEX BY PLS_INTEGER;
v_dept_table dept_table_type; ...
        Mark for Review
(1) Points
        Scalar
        Composite (*)
```

LOB

Incorrect. Refer to Section 2.

27. \_\_\_\_\_ are meant to store large amounts of data. Mark

for Review
(1) Points

variables

Scalar data types

LOBs (\*)

Correct Correct

28. Variables can be assigned a value in both the Executable and Declaration sections of a PL/SQL program. True or False? Mark for Review (1) Points

True (\*)

False

Correct Correct

29. Evaluate the following declaration. Determine whether or not it is legal.

**DECLARE** 

maxsalary NUMBER(7) = 5000;

Mark for Review

(1) Points

Correct.

Not correct. (\*)

Correct Correct

30. Variables can be used in the following ways in a PL/SQL block. (Choose two.) Mark for Review (1) Points

Page 235

PLSQL feedback final exam semister 1 (Choose all correct answers)

To store data values. (\*)

To rename tables and columns.

To refer to a single data value several times. (\*)

To comment code.

Incorrect Incorrect. Refer to Section 2.
31. When a variable is defined using the NOT NULL keywords, the variable must contain a value. True or False? Mark for Review
(1) Points

True (\*)

False

Correct Correct

32. When a variable is defined using the CONSTANT keyword, the value of the variable cannot change. True or False? Mark for Review (1) Points

True (\*)

False

Correct Correct

33. Single row character functions are valid SQL functions in PL/SQL. True or False? Mark for Review (1) Points

True (\*)

False

Correct Correct

PLSQL feedback final exam semister 1
34. Which of the following are disadvantages of implicit data type conversions? (Choose two.)

Mark for Review
(1) Points

(Choose all correct answers)

The code is harder to read and understand (\*)

You cannot store alphabetic characters in a variable of data type NUMBER

If Oracle changes the conversion rules in the future, your code may not work any more (\*)

Oracle cannot implicitly convert a number value to a character string

Incorrect. Refer to Section 2.

35. The DECODE function is available in PL/SQL procedural statements. True or False? Mark for Review (1) Points

True

False (\*)

Correct Correct

36. TO\_NUMBER, TO\_CHAR, and TO\_DATE are all examples of: Mark for Review (1) Points

Implicit conversion functions

Explicit conversion functions (\*)

Character functions

Operators

Correct Correct

37. PL/SQL can convert a VARCHAR2 value containing alphabetic characters to a NUMBER value. True or False? Mark for Review (1) Points

```
True
        False (*)
Correct
                 Correct
                 38.
                         what is the output when the following program is executed?
set serveroutput on
DECLARE
    a VARCHAR2(10) := '333';
    b VARCHAR2(10) := '444';
    c PLS_INTEGER;
    d VARCHAR2(10);
BEGIN
    c := TO_NUMBER(a) + TO_NUMBER(b);
    d := a | | b;
DBMS_OUTPUT.PUT_LINE(c);
    DBMS_OUTPUT.PUT_LINE(d);
END;
        Mark for Review
(1) Points
        Nothing. The code will result in an error.
        c=777 and d=333444 (*)
        c=777 and d=777
        c=333444 and d=777
                          Incorrect. Refer to Section 2.
Incorrect
                 39.
                         Examine the following code. What is the final value of
V_MYBOOL ?
DECLARE
    v_mynumber NUMBER;
    v_mybool BOOLEAN;
    v_mynumber := 6;
v_myboo] := (v_mynumber BETWEEN 10 AND 20);
    v_mybool := NOT (v_mybool);
END;
        Mark for Review
(1) Points
```

True (\*)

```
PLSQL feedback final exam semister 1
```

False

Incorrect. Refer to Section 2. Incorrect

> 40. What is wrong with this assignment statement?

myvar := To be of mot control in the question;
Mark for Review 'To be or not to be';

(1) Points

An assignment statement must be a single line of code

Nothing is wrong, the statement is fine

An assignment statement must have a single semicolon at the end (\*)

"myvar" is not a valid name for a variable

Character literals should not be enclosed in quotes

ct Incorrect. Refer to Section 2. Given this first section of code: Incorrect

**DECLARE** 

v\_result employees.salary%TYPE;

which statement will always return exactly one value? Mark for Review

(1) Points

SELECT salary INTO v\_result

FROM employees;

SELECT salary INTO v\_result FROM employees WHERE last\_name ='Smith';

SELECT salary INTO v\_result FROM employees WHERE department\_id = 80;

```
PLSQL feedback final exam semister 1
        SELECT SUM(salary)
INTO v_result
FROM employees;
(*)
                        Incorrect. Refer to Section 3.
Incorrect
                        Which rows will be deleted from the EMPLOYEES table when the
following code is executed?
DECLARE
    salary employees.salary%TYPE := 12000;
    DELETE FROM employees
    WHERE salary > salary;
END;
        Mark for Review
(1) Points
        All rows whose SALARY column value is greater than 12000.
        All rows in the table.
        No rows. (*)
        All rows whose SALARY column value is equal to 12000.
                        Incorrect. Refer to Section 3.
Incorrect
                        The following code will return the last name of the employee
                43.
whose employee id is equal to 100: True or False?
DECLARE
    v_last_name employees.last_name%TYPE;
    employee_id employees.employee_id%TYPE := 100;
    SELECT last_name INTO v_last_name
    FROM employees
    WHERE employee_id = employee_id;
END:
        Mark for Review
(1) Points
        True
        False (*)
```

Correct Correct

> 44. A variable is declared as:

DECLARE

v\_holdit employees.last\_name%TYPE;

BEGIN ...

Which of the following is a correct use of the INTO clause?

Mark for Review

(1) Points

SELECT \* INTO v\_holdit FROM employees;

SELECT last\_name

INTO v\_holdit FROM employees;

SELECT last\_name

INTO v\_holdit FROM employees WHERE employee\_id=100;

(\*)

SELECT salary

INTO v\_holdit FROM employees WHERE employee\_id=100;

Incorrect. Refer to Section 3. Incorrect

which of the following is NOT a good guideline for retrieving data in PL/SQL? Mark for Review

(1) Points

Declare the receiving variables using %TYPE

The WHERE clause is optional in nearly all cases. (\*)

Specify the same number of variables in the INTO clause as database columns in the SELECT clause.

THE SELECT statement should fetch exactly one row.

Correct Correct

46. How many DML statements can be included in a single transaction? Mark for Review (1) Points

Only one

None. A transaction cannot include DML statements.

A maximum of four DML statements

As many as needed (\*)

Incorrect. Refer to Section 3.

47. The following anonymous block of code is run:

BEGIN

INSERT INTO countries (id, name)
VALUES ('XA', 'Xanadu');
INSERT INTO countries (id, name)
VALUES ('NV','Neverland');
COMMIT;
COMMIT;
ROLLBACK;

END;

What happens when the block of code finishes?

Mark for Review

(1) Points

You have nothing new; the last ROLLBACK undid the INSERTS.

You have the rows added twice; there are four new rows.

You have the two new rows added. (\*)

You get an error; you cannot COMMIT twice in a row.

Incorrect. Refer to Section 3.

48. A PL/SQL block includes the following statement:

SELECT last\_name INTO v\_last\_name FROM employees

WHERE employee\_id=100;

what is the value of SQL%ISOPEN immediately after the SELECT statement is executed? Mark for Review

(1) Points

True

False (\*)

Null

Error. That attribute does not apply for implicit cursors.

Incorrect Incorrect. Refer to Section 3.

Assume there are 5 employees in Department 10. What happens when the following statement is executed?

**UPDATE** employees SET salary=salary\*1.1; Mark for Review (1) Points

All employees get a 10% salary increase. (\*)

No rows are modified because you did not specify "WHERE department\_id=10"

A TOO\_MANY\_ROWS exception is raised.

An error message is displayed because you must use the INTO clause to hold the new salary.

Incorrect. Refer to Section 3. Incorrect

50. which SQL statement can NOT use an implicit cursor? Mark for Review (1) Points

A DELETE statement

An UPDATE statement

A SELECT statement that returns multiple rows (\*)

## PLSQL feedback final exam semister 1 A SELECT statement that returns one row

```
Examine the following code:
DECLARE
    v_salary NUMBER(6);
    v_{constant NUMBER(6)} := 15000;
    v_result VARCHAR(6); := 'MIDDLE';
BEGIN
    IF v_salary != v_constant THEN
    v_result := 'HIGH';
        v_result := 'LOW';
    END IF;
END;
What is the final value of v_result?
        Mark for Review
(1) Points
        HIGH
        LOW (*)
        MIDDLE
        Null
Correct
                 Correct
                 2.
                         Examine the following code:
DECLARE
    a VARCHAR2(6) := NULL;
    b VARCHAR2(6) := NULL;
BEGIN
    IF a = b THEN
       DBMS_OUTPUT.PUT_LINE('EQUAL');
    ELSIF a != b THEN
       DBMS_OUTPUT.PUT_LINE('UNEQUAL');
       DBMS_OUTPUT.PUT_LINE('OTHER');
    END IF;
END;
Which word will be displayed?
        Mark for Review
(1) Points
        UNEQUAL
```

Correct

Correct

**EQUAL** 

Nothing will be displayed

OTHER (\*)

Incorrect. Refer to Section 4.

3. How many ELSIF statements are you allowed to have in a compound IF statement? Mark for Review (1) Points

Only one

As many as you want (\*)

They must match the same number as the number of ELSE statements.

None; the command is ELSE IF;

Incorrect. Refer to Section 4.

4. What is the correct form of a simple IF statement? Mark for Review (1) Points

IF condition THEN statement;

IF condition THEN statement;
END IF; (\*)

IF condition;
THEN statement;

END IF;

IF condition

THEN statement

ENDIF;

Correct Correct

```
PLSQL feedback final exam semister 1
                       You need to execute a set of statements 10 times, increasing
a counter by 1 each time. Which of the following PL/SQL constructs can do this?
(Choose three) Mark for Review
(1) Points
                        (Choose all correct answers)
       IF ... THEN ... ELSE
       A WHILE loop (*)
       CASE ... WHEN ... THEN
       A FOR loop (*)
       A basic loop (*)
                        Incorrect. Refer to Section 4.
Incorrect
                       What kind of statement is best suited for displaying the
multiplication table for "sixes": 6x1=6, 6x2=12 ... 6x12=72? Mark for Review
(1) Points
       CASE expression
       IF statement
       CASE statement
       LOOP statement (*)
                       Incorrect. Refer to Section 4.
Incorrect
                7.
                       Which kind of loop is this?
v_count := 1;
LOOP
    v_count := v_count + 1;
    EXIT WHEN i > 20;
END LOOP;
       Mark for Review
(1) Points
        FOR loop
```

Page 246

IF-THEN loop

```
PLSQL feedback final exam semister 1
        Basic loop (*)
        WHILE loop
        CASE loop
Correct
                Correct
                        Which one of these tasks is best done using a LOOP
statement?
                Mark for Review
(1) Points
        Assigning a letter grade to a numerical score
        Calculating and displaying the sum of all integers from 1 to 100 (*)
        Testing if a condition is true, false or null
        Fetching and displaying an employee's last name from the database
Incorrect
                        Incorrect. Refer to Section 4.
                9.
                        A PL/SQL block contains the following code:
v_counter := 1;
    EXIT WHEN v_counter=5;
END LOOP;
v_counter := v_counter + 1;
what is the value of V_COUNTER after the loop is finished?
        Mark for Review
(1) Points
        5
        6
        1
        This is an infinite loop; the loop will never finish. (*)
```

Page 247

Correct

Correct

```
PLSQL feedback final exam semister 1
                                                                     Mark for
               10.
                       Which one of these is NOT a kind of loop?
Review
(1) Points
       ASCENDING loop (*)
        FOR loop
        Basic loop
       WHILE loop
DECLARE
    v_salary NUMBER(6,2) := NULL;
   v_sal_desc VARCHAR2(10);
BEGIN
    CASE
      WHEN v_salary < 10000 THEN v_sal_desc := 'Low Paid';
      WHEN v_salary >= 10000 THEN v_sal_desc := 'High Paid';
    END CASE;
END;
       Mark for Review
(1) Points
        High Paid
        Low Paid
        Nu11
       The code will fail and return an exception (*)
                       Incorrect. Refer to Section 4.
Incorrect
12. You want to assign a value to v_result which depends on the value of v_grade: if v_grade = 'A' set v_result to 'Very Good' and so on.
DECLARE
   v_grade CHAR(1);
    v_result VARCHAR2(10);
BEGIN
    v_result :=
      CASE v_grade
The next line should be
       Mark for Review
```

```
PLSQL feedback final exam semister 1
(1) Points
        WHEN v_grade = 'A' THEN 'Very Good'
        WHEN 'A' THEN 'Very Good';
        WHEN 'A' THEN v_result := 'Very Good';
        WHEN 'A' THEN 'Very Good' (*)
                        Incorrect. Refer to Section 4.
Incorrect
                        What will be the value of variable c after the following
                13.
code is executed?
DECLARE
    a BOOLEAN := TRUE;
    b BOOLEAN := FALSE;
    c NUMBER;
BEGIN
    c :=
        CASE
            WHEN a AND b THEN 10
            WHEN NOT a THEN 20
            WHEN a OR b THEN 30
            ELSE 40
        END:
END;
        Mark for Review
(1) Points
        30 (*)
        20
        40
        10
                        Incorrect. Refer to Section 4.
Incorrect
                14.
                        What will be the value of variable c after the following
code is executed?
DECLARE
    a BOOLEAN := TRUE;
    b BOOLEAN := NULL;
    c NUMBER;
BEGIN
```

Page 249

```
IF a AND b THEN c := 2;
       ELSIF a OR b THEN c := 0;
       ELSE c := 1;
    END IF;
END;
        Mark for Review
(1) Points
        1
        Null
        0 (*)
        2
                          Incorrect. Refer to Section 4.
Incorrect
                          what value will v_answer contain after the following code is
                 15.
executed?
DECLARE
    v_age NUMBER:= 18;
v_answer VARCHAR2(10);
BEGIN
    v_answer :=
       CASE
          WHEN v_age < 25 THEN 'Young'
          WHEN v_age = 18 THEN 'Exactly 18' ELSE 'Older'
       END CASE;
END;
        Mark for Review
(1) Points
        Exactly 18
        Young (*)
        Null
        older
Correct
                 Correct
                 16.
                          Examine the following code:
DECLARE
v_bool BOOLEAN := FALSE;
                                         Page 250
```

```
PLSQL feedback final exam semister 1
v_counter NUMBER(4) := 0;
BEGIN
... Line A
END;
which of the following is NOT valid at line A?
        Mark for Review
(1) Points
        WHILE NOT v_boolean LOOP
        WHILE v_boolean AND v_counter < 6 LOOP
        WHILE v_counter > 8 LOOP
        WHILE v_counter IN 1..5 LOOP (*)
Incorrect
                        Incorrect. Refer to Section 4.
                        In a FOR loop, an implicitly declared counter automatically
                17.
increases or decreases with each iteration. True or False?
                                                                 Mark for Review
(1) Points
        True (*)
        False
Incorrect
                        Incorrect. Refer to Section 4.
                        Which statement best describes when a FOR loop should be
                18.
used?
       Mark for Review
(1) Points
        when the number of iterations is known (*)
        when testing the value in a Boolean variable
        When the controlling condition must be evaluated at the start of each
iteration
                        Incorrect. Refer to Section 4.
Incorrect
                19.
                        Which statement best describes when a WHILE loop shouild be
used?
       Mark for Review
(1) Points
                                      Page 251
```

```
PLSQL feedback final exam semister 1
```

When the number of iterations is known

When repeating a sequence of statements until the controlling condition is no longer true (\*)

When assigning a value to a Boolean variable

when testing whether a variable is null

Incorrect. Refer to Section 4. Incorrect

20. In a WHILE loop, the statements inside the loop must execute at least once. True or False? Mark for Review (1) Points

True

False (\*)

Incorrect. Refer to Section 4.
What will happen when the following code is executed? Incorrect 21.

**BEGIN** FOR i in 1 ... 3 LOOP DBMS\_OUTPUT.PUT\_LINE (i); i := i + 1;END LOOP; END; Mark for Review

(1) Points

It will display 1, 2, 3.

It will display 2, 3, 4.

It will result in an error because you cannot modify the counter in a FOR loop. (\*)

It will result in an error because the counter was not explicitly declared.

Incorrect. Refer to Section 4. Incorrect

22. what kinds of loops can be nested? Mark for Review (1) Points

Page 252

```
PLSQL feedback final exam semister 1
```

BASIC loops

WHILE loops FOR loops All of the above (\*) Incorrect. Refer to Section 4. Incorrect when coding two nested loops, both loops must be of the same 23. type. For example, you cannot code a FOR loop inside a WHILE loop. True or False? Mark for Review (1) Points True False (\*) Correct Correct 24. In the following code fragment, you want to exit from the outer loop at Line A if  $v_n$  which statement would you write on Line A? <<br/>big\_loop>> WHILE condition\_1 LOOP <<small\_loop>> FOR i IN 1..10 LOOP DBMS\_OUTPUT.PUT\_LINE(i); -- Line A END LOOP; END LOOP; Mark for Review (1) Points IF v\_number = 6 THEN EXIT; EXIT outer\_loop WHEN v\_number = 6; EXIT big\_loop WHEN v\_number = 6; (\*) EXIT small\_loop WHEN v\_number = 6; Incorrect. Refer to Section 4. Incorrect

Page 253

25. Examine the following code: **BEGIN** FOR j IN 1..5 LOOP FOR j IN 1..8 LOOP EXIT WHEN j = 7; DBMS\_OUTPUT.PUT\_LINE(i || j); END LOOP; END LOOP; END; How many lines of output will be displayed when this code is executed? Mark for Review (1) Points 35 6 30 (\*) 40 Correct Correct Section 5 26. What is wrong with the following code? **DECLARE** CURSOR emp\_curs(p\_dept\_id NUMBER) IS SELECT \* FROM employees WHERE department\_id = p\_dept\_id; FOR dept\_rec IN (SELECT \* FROM departments) LOOP DBMS\_OUTPUT.PUT\_LINE(dept\_rec.department\_name); FOR emp\_rec IN emp\_curs(dept\_rec.department\_id) LOOP DBMS\_OUTPUT.PUT\_LINE(emp\_rec.last\_name); END LOOP; END LOOP; END; Mark for Review (1) Points The DEPARTMENTS cursor must be declared with a parameter.

You cannot use a cursor with a subquery in nested loops.

You cannot use two different kinds of loop in a single PL/SQL block.

EMP\_CURS should not be DECLAREd explicitly; it should be coded as a subquery in a cursor FOR loop.

```
PLSQL feedback final exam semister 1
```

Nothing is wrong. The block will execute successfully and display all departments and the employees in those departments. (\*)

Correct Correct when using multiple nested cursors, what kinds of loops can 27. you use? Mark for Review (1) Points Cursor FOR loops only. Basic loops only. WHILE loops only. None of the above. All of the above. (\*) Incorrect. Refer to Section 5. Incorrect You want to display all locations, and the departments in 28. each location. Examine the following code: CURSOR loc\_curs IS SELECT \* FROM locations; CURSOR dept\_curs(p\_loc\_id NUMBER) IS SELECT \* FROM departments WHERE location\_id = p\_loc\_id; FOR loc\_rec IN loc\_curs LOOP DBMS\_OUTPUT.PUT\_LINE(loc\_rec.city); FOR dept\_rec IN dept\_curs(-- Point A --) LOOP DBMS\_OUTPUT.PUT\_LINE(dept\_rec.department\_name); END LOOP; END LOOP; END; What should you code at Point A? Mark for Review (1) Points p\_loc\_id location\_id nu11 LOOP ... END LOOP;

PLSQL feedback final exam semister 1 loc\_rec.location\_id (\*)

Incorrect

Incorrect. Refer to Section 5.

Assume that you have declared a cursor called C\_EMP. Which of the following statements about C\_EMP is correct? (Choose two.) Review (1) Points

(Choose all correct answers)

You can use c\_emp%NOTFOUND to exit a loop. (\*)

You can fetch rows when c\_emp%ISOPEN evaluates to FALSE.

You can use c\_emp%ROWCOUNT to return the number of rows returned by the cursor so far. (\*)

You can use c\_emp%FOUND after the cursor is closed.

Correct Correct

30. Which of the following statements about the %ISOPEN cursor Mark for Review attribute is true? (1) Points

You can issue the %ISOPEN cursor attribute only when a cursor is open.

You can issue the %ISOPEN cursor attribute only when more than one record is returned.

You can issue the %ISOPEN cursor attribute when a cursor is open or closed. (\*)

If a cursor is open, then the value of %ISOPEN is false.

Incorrect. Refer to Section 5. Incorrect 31. The DEPARTMENTS table contains four columns. Examine the following code:

DECLARE

CURSOR dept\_curs IS
 SELECT \* FROM departments;

v\_dept\_rec dept\_curs%ROWTYPE;

BEGIN

OPEN dept\_curs:

FETCH dept\_curs INTO v\_dept\_rec;

```
PLSQL feedback final exam semister 1
```

Which one of the following statements is true?

Mark for Review

(1) Points

v\_dept\_rec contains the first four rows of the departments table.

The FETCH will fail because the structure of  $v\_dept\_rec$  does not match the structure of the cursor.

v\_dept\_rec contains the first row of the departments table. (\*)

The block will fail because the declaration of v\_dept\_rec is invalid.

Correct Correct

32. Which of the following cursor attributes is set to the total number of rows returned so far? Mark for Review
(1) Points

**%ISOPEN** 

%NOTFOUND

%FOUND

%ROWCOUNT (\*)

Incorrect. Refer to Section 5.

33. Examine the following code fragment:

DECLARE

CURSOR emp\_curs IS

SELECT first\_name, last\_name FROM employees;
v\_emp\_rec emp\_curs%ROWTYPE;

BEGIN

FETCH emp\_curs INTO v\_emp\_rec;
 DBMS\_OUTPUT.PUT\_LINE(... Point A ...);
inbsp...

To display the fetched last name, what should you code at Point A?

Mark for Review
(1) Points

v\_emp\_rec.last\_name (\*)

```
PLSQL feedback final exam semister 1
        v_emp_rec(last_name)
         v_emp_rec
         last_name
         None of the above
                           Incorrect. Refer to Section 5.
Incorrect
                          Which of the following cursor attributes evaluates to TRUE
                 34.
                          Mark for Review
if the cursor is open?
(1) Points
        %ISOPEN (*)
        %NOTFOUND
        %FOUND
        %ROWCOUNT
                           Incorrect. Refer to Section 5.
Incorrect
35. The emp the following code is executed?
                          The employees table contains 20 rows. What will happen when
DECLARE
  &nbspCURSOR emp_curs IS
    &nbspSELECT_job_id FROM employees;
    v_job_id employees.job_id%TYPE;
BEGIN
    OPEN emp_curs;
    LOOP
        FETCH emp_curs INTO v_job_id;
       DBMS_OUTPUT.PUT_LINE(v_job_id);
EXIT WHEN emp_curs%NOTFOUND;
    END LOOP;
    CLOSE emp_curs;
END;
        Mark for Review
(1) Points
         20 job_ids will be displayed.
        The block will fail and an error message will be displayed.
```

Page 258

21 rows of output will be displayed; the first job\_id will be displayed twice.

21 rows of output will be displayed; the last job\_id will be displayed twice. (\*)

Correct Correct

36. An implicit cursor can be used for a multiple-row SELECT statement. True or False? Mark for Review (1) Points

True

False (\*)

Correct Correct

- 37. Place the following statements in the correct sequence:
- OPEN my\_curs;
- CLOSE my\_curs;
- CURSOR my\_curs IS SELECT my\_column FROM my\_table;
- 4. FETCH my\_curs INTO my\_variable;

Mark for Review

(1) Points

C,D,A,B

C,A,D,B (\*)

A,C,D,B

C,A,B,D

Correct Correct

38. What will happen when the following code is executed?

DECLARE CURSOR emp\_curs IS

SELECT salary FROM employees;

v\_salary employees.salary%TYPE;

**BEGIN** 

OPEN emp\_curs;

FETCH emp\_curs INTO v\_salary;

CLOSE emp\_curs;

FETCH emp\_curs INTO v\_salary;

END:

Mark for Review

(1) Points

The block will fail and an INVALID\_CURSOR exception will be raised. (\*)

The first employee row will be fetched twice.

The first two employee rows will be fetched.

The block will fail and a TOO\_MANY\_ROWS exception will be raised.

Incorrect. Refer to Section 5.

39. After a cursor has been closed, it can be opened again in the same PL/SQL block. True or False? Mark for Review (1) Points

True (\*)

False

Incorrect. Refer to Section 5.

40. For which type of SQL statement must you use an explicit cursor? Mark for Review
(1) Points

DML statements that process more than one row.

Queries that return more than one row. (\*)

Data Definition Language (DDL) statements.

Queries that return a single row.

**DECLARE** 

CURSOR emp\_curs IS SELECT salary FROM employees; v\_salary employees.salary%TYPE;

Page 260

```
PLSQL feedback final exam semister 1
BEGIN
    FETCH emp_curs INTO v_salary;
    DBMS_OUTPUT.PUT_LINE(v_salary);
    CLOSE emp_curs;
END;
        Mark for Review
(1) Points
        The first employee's salary will be fetched and displayed.
        All employees' salaries will be fetched and displayed.
        The execution will fail and an error message will be displayed. (*)
        The lowest salary value will be fetched and displayed.
Correct
                 Correct
                 42.
                          Examine the following code:
DECLARE
    CURSOR emp_curs IS
       SELECT last_name, salary
       FROM employees
       ORDER BY salary;
    v_last_name employees.last_name%TYPE;
    v_salary employees.salary%TYPE;
which of the following statements successfully opens the cursor and fetches the first row of the active set?

Mark for Review
(1) Points
        OPEN emp_curs;
FETCH emp_curs INTO v_last_name, v_salary;
(*)
        OPEN emp_curs;
FETCH emp_curs INTO v_salary, v_last_name;
        OPEN emp_curs;
FETCH FIRST emp_curs INTO v_last_name, v_salary;
        OPEN emp_curs;
FETCH emp_curs;
```

```
PLSQL feedback final exam semister 1
                        Incorrect. Refer to Section 5.
Incorrect
                        The following code fragment shows a cursor FOR loop:
                43.
FOR emp_record IN emp_cursor LOOP .....
Which of the following do NOT need to be coded explicitly? (Choose three.)
        Mark for Review
(1) Points
                        (Choose all correct answers)
        OPEN emp_cursor; (*)
        DECLARE CURSOR emp_cursor IS ...
        emp_record emp_cursor%ROWTYPE; (*)
        FETCH emp_cursor INTO emp_record; (*)
        END LOOP;
                        Incorrect. Refer to Section 5
Incorrect
                44.
                        what is wrong with the following code?
DECLARE
    CURSOR dept_curs IS SELECT * FROM departments;
    FOR dept_rec IN dept_curs LOOP
       DBMS_OUTPUT.PUT_LINE(dept_curs%ROWCOUNT || dept_rec.department_name);
    END LOOP;
    DBMS_OUTPUT.PUT_LINE(dept_rec.department_id);
        Mark for Review
(1) Points
        The cursor DEPT_CURS has not been opened.
        The implicitly declared record DEPT_REC cannot be referenced outside the
cursor FOR loop. (*)
        You cannot use %ROWCOUNT with a cursor FOR loop.
        The cursor DEPT_CURS has not been closed.
        Nothing is wrong, this code will execute successfully.
```

Page 262

Incorrect

Incorrect. Refer to Section 5

45. What is wrong with the following code?

**BEGIN** 

FOR emp\_rec IN

(SELECT \* FROM employees WHERE ROWNUM < 10

FOR UPDATE NOWAIT) LOOP

DBMS\_OUTPUT.PUT\_LINE(emp\_rec%ROWCOUNT || emp\_rec.last\_name):

END LOOP;

END;

Mark for Review

(1) Points

You cannot use FOR UPDATE NOWAIT with a cursor FOR loop using a subquery.

You cannot reference %ROWCOUNT with a cursor FOR loop using a subquery. (\*)

The field EMP\_REC.LAST\_NAME does not exist.

You cannot use ROWNUM with a cursor FOR loop.

The cursor has not been opened.

Correct Correct

46. User MARY has locked a row of the EMPLOYEES table. Now, user SAEED tries to open the following cursor: CURSOR c IS SELECT \* FROM employees FOR UPDATE WAIT 5; What will happen when SAEED's session tries to fetch the row that MARY has locked?

What will happen when SAEED's session tries to fetch the row that MARY has locked? Mark for Review
(1) Points

SAEED's session successfully fetches the first 5 rows and then waits indefinitely to fetch the 6th row.

SAEED's session waits for 5 seconds, and then raises an exception if MARY has not unlocked the row. (\*)

SAEED's session waits for 5 seconds, then SAEED is disconnected from the database.

SAEED's session waits for 5 seconds, then MARY's session is rolled back.

SAEED's session waits for 5 minutes, and then raises an exception if MARY Page 263

PLSQL feedback final exam semister 1 has not unlocked the row.

Incorrect. Refer to Section 5.

47. User TOM has locked a row in the WORKERS table. Now, user DICK wants to open the following cursor: CURSOR c IS

SELECT \* FROM workers FOR UPDATE NOWAIT;

What will happen when DICK opens the cursor and tries to fetch rows? Mark for Review

(1) Points

TOM's session is rolled back. DICK's session successfully fetches rows from the cursor.

DICK's session waits indefinitely.

Both sessions wait for a few seconds; then the system breaks all locks and both sessions raise an exception.

DICK's session immediately raises an exception. (\*)

The c%NOWAIT attribute is set to TRUE.

Incorrect. Refer to Section 5.

48. You want to declare a cursor which locks each row fetched by the cursor. Examine the following code:

DECLARE

CURSOR emp\_curs IS

SELECT \* FROM employees

FOR -- Point A

Which of the following can NOT be coded at Point A? Mark for Review

(1) Points

UPDATE;

UPDATE OF salary;

UPDATE OF employees; (\*)

UPDATE NOWAIT;

Incorrect Incorrect. Refer to Section 5.

PLSQL feedback final exam semister 1
49. What is one of the advantages of using parameters with a cursor? Mark for Review
(1) Points

You can use a cursor FOR loop.

You can declare the cursor FOR UPDATE.

You do not need to DECLARE the cursor at all.

You can use a single cursor to fetch a different set of rows each time the cursor is opened. (\*)

It will execute much faster than a cursor without parameters.

Correct Correct

50. There are 12 distinct JOB\_IDs in the EMPLOYEES table. You need to write some PL.SQL code to fetch and display all the employees with a specific JOB\_ID. The chosen JOB\_ID can be different each time the code is executed. What is the best way to do this?

Mark for Review
(1) Points

Write 12 separate PL/SQL blocks, each declaring a cursor with a different JOB ID in the WHERE clause.

Write a single PL/SQL block which declares 12 cursors, one for each distinct value of  ${\tt JOB\_ID}$ .

Write a single PL/SQL block which declares one cursor using a parameter for the JOB\_ID. (\*)

Write a single PL/SQL block which uses a cursor to fetch all the employee rows, with an IF statement to decide which of the fetched rows to display.

Incorrect. Refer to Section 5.

1. A program which specifies a list of operations to be performed sequentially to achieve the desired result can be called: Mark for Review (1) Points

declarative

nondeclarative

procedural (\*)

low level

Correct

2. SQL is a common access language for many types of databases, including Oracle. True or False? Mark for Review (1) Points

True (\*)

False

Correct

3. Which of the following statements about PL/SQL and SQL is true? Mark for Review (1) Points

PL/SQL and SQL are both ANSI-compliant.

PL/SQL and SQL can be used with many types of databases, including Oracle.

PL/SQL and SQL are both Oracle proprietary programming languages.

PL/SQL allows basic program logic and control flow to be combined with SQL statements.  $(\mbox{\ensuremath{^{+}}})$ 

Correct

4. Which of the following can you use PL/SQL to do? Mark for Review (1) Points

Update data (DML)

Develop Web applications using the Web Application Toolkit

Manage database security

Create customized reports

 $$\operatorname{\text{PLSQL}}$  feedback final exam semister 1 All of the above (\*)

Correct

5. PL/SQL can be used not only with an Oracle database, but also with any kind of relational database. True or False? Mark for Review (1) Points

True

False (\*)

Correct

6. Which of the following statements about exception handling in PL/SQL is false? Mark for Review (1) Points

You can prepare for database exceptions by creating exception handlers.

You can prepare for application exceptions by creating exception handlers.

Exception handling code tells your program what to do when an error is encountered.

Exception handling code can be grouped together in a PL/SQL block.

None of the above (\*)

Incorrect. Refer to Section 1.

7. What kind of block is defined by the following PL/SQL code?

BEGIN

DBMS\_OUTPUT.PUT\_LINE('My first quiz');
END;

Mark for Review (1) Points

procedure

subroutine

function

anonymous (\*)

Incorrect. Refer to Section 1.

Which keywords must be included in every PL/SQL block? 8. (Choose two.) (1) Points Mark for Review

(Choose all correct answers)

DECLARE

END; (\*)

**EXCEPTION** 

BEGIN (\*)

DBMS\_OUTPUT.PUT\_LINE

Incorrect. Refer to Section 1.

- 9. Given below are the parts of a PL/SQL block:
- 1. END;
- 2. EXCEPTION
  3. DECLARE
  4. BEGIN

Arrange the parts in order.

Mark for Review (1) Points

2,1,4,3

3,4,2,1 (\*)

3,2,4,1

4,3,2,1

Correct

PLSQL feedback final exam semister 1
10. What is the purpose of using DBMS\_OUTPUT.PUT\_LINE in a
PL/SQL block? Mark for Review
(1) Points

To perform conditional tests

To allow a set of statements to be executed repeatedly

To display results to check if our code is working correctly (\*)

To store new rows in the database

Correct

11. Errors are handled in the Exception part of the PL/SQL block. True or False? Mark for Review (1) Points

True (\*)

False

Correct

12. In which part of the PL/SQL block are declarations of variables defined? Mark for Review (1) Points

Executable

Exception

Declarative (\*)

Definition

Correct

 $13.\,$  Which statements are optional in a PL/SQL block? (Choose two.) Mark for Review (1) Points

(Choose all correct answers)

```
PLSQL feedback final exam semister 1
         DECLARE (*)
         BEGIN
         EXCEPTION (*)
         END;
                   Correct
         Section 2
14. When you use a function to convert data types in a PL/SQL program, it is called _____ conversion. Mark for Review
(1) Points
         Explicit (*)
         Implicit
         TO_CHAR
                   Correct
                  15.
                           what is the output when the following program is executed?
set serveroutput on
DECLARE
    a VARCHAR2(10) := '333';
    b VARCHAR2(10) := '444';
    c PLS_INTEGER;
    d VARCHAR2(10);
BEGIN
    c := TO_NUMBER(a) + TO_NUMBER(b);
    d := a || b;
DBMS_OUTPUT.PUT_LINE(c);
DBMS_OUTPUT.PUT_LINE(d);
END;
Mark for Review
(1) Points
         Nothing. The code will result in an error.
         c=777 and d=333444 (*)
         c=777 and d=777
                                            Page 270
```

c=333444 and d=777

Correct

16. Which of the following are disadvantages of implicit data type conversions? (Choose two.) Mark for Review (1) Points

(Choose all correct answers)

The code is harder to read and understand (\*)

You cannot store alphabetic characters in a variable of data type NUMBER

If Oracle changes the conversion rules in the future, your code may not work any more (\*)

Oracle cannot implicitly convert a number value to a character string

Correct

17. Examine the following code:

1 DECLARE

2 x NUMBER;

3 BEGIN

4 x := '300';

5 END;

After line 4, what is the value of x?

Mark for Review (1) Points

'300'

300 (\*)

NULL

Correct

18. Single row character functions are valid SQL functions in PL/SQL. True or False? Mark for Review (1) Points

```
PLSQL feedback final exam semister 1
```

True (\*)

False

Correct

19. The implicit data type conversion at Point A may not work correctly. Why not?

DECLARE

v\_mydate DATE;

BEGIN

V\_MYDATE := '29-Feb-04'; -- Point A

END;

Mark for Review
(1) Points

There are only 28 days in February

Oracle cannot implicitly convert a character string to a date, even if the string contains a valid date value

If the database language is not English, 'Feb' has no meaning. (\*)

V\_MYDATE has been entered in uppercase

Correct

20. What is wrong with this assignment statement?
myvar := 'To be or not to be';
'That is the question';
Mark for Review
(1) Points

An assignment statement must be a single line of code

Nothing is wrong, the statement is fine

An assignment statement must have a single semicolon at the end (\*)

"myvar" is not a valid name for a variable

Character literals should not be enclosed in quotes

Correct

21. The DECODE function is available in PL/SQL procedural statements. True or False? Mark for Review

(1) Points

True

False (\*)

Correct

22. You need to declare a variable to hold a value which has been read from the SALARY column of the EMPLOYEES table. Which of the following is an advantage of declaring the variable as: employees.salary%TYPE? Mark for Review

(1) Points

It is shorter than coding NUMBER(8,2)

If the SALARY column is ALTERed later, the PL/SQL code need not be changed.

It executes much faster than using NUMBER(8,2)

It allows the software to perform implicit data type conversions.

Correct

23. Which of the following declarations is invalid? Mark for Review (1) Points

v\_count PLS\_INTEGER:=0;

college\_name VARCHAR2(20):='Harvard';

v\_pages CONSTANT NUMBER; (\*)

v\_start\_date DATE := sysdate+1;

Correct

24. If you are using the %TYPE attribute, you can avoid hard coding the:

Mark for Review

Page 273

(1) Points						
	Data type (*)					
	Table name					
	Column name					
	Constraint					
Incorrect. Refer to Section 2.						
DECLARE display_	25. Is the following variable declaration correct or not ?					
Mark for Review (1) Points						
	Correct.					
	Not correct. (*)					
	Incorrect. Refer to Section 2.					
26. Variables can be assigned a value in both the Executable and Declaration sections of a PL/SQL program. True or False? Mark for Review (1) Points						
	True (*)					
	False					
	Correct					
value of (1) Poin	27. When a variable is defined using the CONSTANT keyword, the the variable cannot change. True or False? Mark for Review					
	True (*)					
	False					

Correct

Identify which of the following assignment statements are  $\mbox{\it Mark}$  for  $\mbox{\it Review}$ 28. valid. (Choose three.) (1) Points

(Choose all correct answers)

v\_last\_name := Chandra;

v\_blackout\_date := '31-DEC-2006'; (\*)

v\_population := 333444; (\*)

v\_music\_type := 'ROCK'; (\*)

Correct

29. Assignment statements can continue over several lines in PL/SQL. True or False? Mark for Review (1) Points

True (\*)

False

Correct

Valid identifiers begin with a Mark for Review 30. (1) Points

Number

Letter (\*)

Special character

Correct

Which of the following are valid identifiers? (Choose two.) Mark for 31. Review (1) Points

> (Choose all correct answers) Page 275

```
PLSQL feedback final exam semister 1
        yesterday (*)
        yesterday's date
        number_of_students_in_the_class
        v$testresult (*)
        #students
                 Incorrect. Refer to Section 2.
                         which of the following are PL/SQL lexical units? (Choose
two.) Mark for Review
(1) Points
                        (Choose all correct answers)
        Identifiers (*)
        Table Columns
        Reserved Words (*)
        Anonymous Blocks
        SQL Workshop
                 Correct
                33.
                         What is the data type of the variable V_DEPT_TABLE in the
following declaration?
DECLARE
TYPE dept_table_type IS TABLE OF departments%ROWTYPE INDEX BY PLS_INTEGER;
v_dept_table_dept_table_type; ...
Mark for Review
(1) Points
```

Page 276

Scalar

Composite (\*)

LOB

Correct

34. \_\_\_\_ are meant to store large amounts of data. Mark

for Review (1) Points

variables

Scalar data types

LOBs (\*)

Correct

35. A collection is a composite data type. True or False? Mark (1) Points

True (\*)

False

Correct

labeled? (1) Points 36. When nested blocks are used, which blocks can or must be Mark for Review

The inner block must be labeled, the outer block can be labeled.

Both blocks must be labeled

Nested blocks cannot be labeled

The outer block must be labeled if it is to be referred to in the inner block. (\*)

Correct

37. When an exception occurs within a PL/SQL block, the Page 277

```
remaining statements in the executable section of the block are skipped. True or
False? Mark for Review
(1) Points
        True (*)
        False
                 Correct
                         What will be displayed when the following code is executed?
                38.
DECLARE
    x VARCHAR2(6) := 'Chang';
BEGIN
   DECLARE
      x VARCHAR2(12) := 'Susan';
    BEGIN
      x := x \mid \mid x;
    END:
    DBMS_OUTPUT.PUT_LINE(x);
Mark for Review
(1) Points
        Susan
        Chang (*)
        ChangChang
        SusanChang
        The code will fail with an error
                 Incorrect. Refer to Section 2.
                         An exception occurs within the inner block of two nested
blocks. The inner block does not have an EXCEPTION section. What always happens?
Mark for Review
(1) Points
        Both blocks fail and an error message is displayed by the calling
environment
        The exception is propagated to the outer block (*)
        Oracle automatically tries to re-execute the inner block
                                       Page 278
```

The user's database session is automatically disconnected

Incorrect. Refer to Section 2.

```
Examine the following code. Line A causes an exception.
                  40.
what will be displayed when the block is executed?
DECLARE
    var_a NUMBER := 6;
var_b DATE;
BEGIN
    var_a := var_a * 2;
    var_b := '28 December 2006'; -- Line A
    var_a := var_a * 2;
EXCEPTION
    WHEN OTHERS THEN
       DBMS_OUTPUT.PUT_LINE(var_a);
END;
Mark for Review
(1) Points
         12 (*)
         24
         6
         Nothing will be displayed
                   Correct
          The following anonymous block of code is run:
41.
BEGIN
    INSERT INTO countries (id, name)
VALUES ('XA', 'Xanadu');
SAVEPOINT XA;
    INSERT INTO countries (id, name)
VALUES ('NV', 'Neverland');
    COMMIT;
    ROLLBACK TO XA;
END;
what happens when the block of code finishes?
Mark for Review
(1) Points
```

No data is inserted and no errors occur.

No data is inserted and an error occurs

Two rows are inserted and no errors occur.

Two rows are inserted and an error occurs. (\*)

Correct

42. The following anonymous block of code is run:

**BEGIN** 

INSERT INTO countries (id, name)
VALUES ('XA', 'Xanadu');
INSERT INTO countries (id, name)

VALUES ('NV', 'Neverland');

COMMIT;

COMMIT:

ROLLBACK;

END:

What happens when the block of code finishes?

Mark for Review

(1) Points

You have nothing new; the last ROLLBACK undid the INSERTS.

You have the rows added twice; there are four new rows.

You have the two new rows added. (\*)

You get an error; you cannot COMMIT twice in a row.

Correct

Which of the following is NOT a good guideline for \_? Mark for Review retrieving data in PL/SQL? (1) Points

Declare the receiving variables using %TYPE

The WHERE clause is optional in nearly all cases. (\*)

Specify the same number of variables in the INTO clause as database columns in the SELECT clause.

THE SELECT statement should fetch exactly one row. Page 280

#### Correct

44. The following code will return the last name of the employee whose employee id is equal to 100: True or False?

DECLARE

v\_last\_name employees.last\_name%TYPE;
employee\_id employees.employee\_id%TYPE := 100;

BEGIN

SELECT last\_name INTO v\_last\_name
FROM employees
WHERE employee\_id = employee\_id;

END;

Mark for Review
(1) Points

True

False (\*)

#### Correct

45. A variable is declared as:

**DECLARE** 

v\_holdit employees.last\_name%TYPE;

BEGIN ...

Which of the following is a correct use of the INTO clause?

Mark for Review (1) Points

SELECT \*
INTO v\_holdit
FROM employees;

SELECT last\_name
INTO v\_holdit
FROM employees;

SELECT last\_name
INTO v\_holdit
FROM employees
WHERE employee\_id=100;
(\*)

SELECT salary INTO v\_holdit FROM employees PLSQL feedback final exam semister 1 WHERE employee\_id=100;

Correct

46. Which one of these SQL statements can be directly included in a PL/SQL executable block? Mark for Review (1) Points

DELETE FROM employees
WHERE department\_id=60;
(\*)

SELECT salary FROM employees
WHERE department\_id=60;

CREATE TABLE new\_emps (last\_name VARCHAR2(10), first\_name VARCHAR2(10));

DROP TABLE locations;

Correct

47. A variable is declared as:

**DECLARE** 

v\_salary employees.salary%TYPE;

BEGIN

which of the following is a correct use of the INTO clause?

Mark for Review (1) Points

SELECT salary
INTO v\_salary
FROM employees
WHERE employee\_id=100;
(\*)

SELECT v\_salary INTO salary FROM employees WHERE employee\_id=100;

SELECT salary FROM employees INTO v\_salary;

SELECT salary

FROM employees
WHERE employee\_id=100
INTO v\_salary;

Incorrect. Refer to Section 3.

48. A PL/SQL block includes the following statement:

SELECT last\_name INTO v\_last\_name FROM employees WHERE employee\_id=100;

what is the value of SQL%ISOPEN immediately after the SELECT statement is executed?

Mark for Review (1) Points

True

False (\*)

Null

Error. That attribute does not apply for implicit cursors.

Correct

49. There are no employees in Department 77. What will happen when the following block is executed?

BEGIN

DELETE FROM employees
WHERE department\_id=77;

DBMS\_OUTPUT.PUT\_LINE(SQL%ROWCOUNT)

END;

Mark for Review

(1) Points

A NO\_DATA\_FOUND exception is raised.

A NULL is displayed.

A zero (0) is displayed. (\*)

 $\,$  An exception is raised because the block does not contain a COMMIT statement.

Incorrect. Refer to Section 3.

Page 283

50. Assume there are 5 employees in Department 10. What happens when the following statement is executed?

UPDATE employees

SET salary=salary\*1.1;

Mark for Review

(1) Points

All employees get a 10% salary increase. (\*)

No rows are modified because you did not specify "WHERE department\_id=10"

A TOO\_MANY\_ROWS exception is raised.

An error message is displayed because you must use the INTO clause to hold the new salary.

#### Correct

Which of the following can you use PL/SQL to do? Mark for Review
 Points

Update data (DML)

Develop Web applications using the Web Application Toolkit

Manage database security

Create customized reports

All of the above (\*)

Correct

<sup>2.</sup>PL/SQL is an Oracle proprietary, procedural, 4GL programming language.
True or False? Mark for Review
(1) Points

True
False (*)
Incorrect. Refer to Section 1
3. What kind of block is defined by the following PL/SQL code? BEGIN DBMS_OUTPUT.PUT_LINE('My first quiz'); END; Mark for Review (1) Points
procedure
subroutine
function

anonymous (*	PLSQL f	feedback final e	xam semister 1	
Incorrect. R	efer to Section 1.			
Section 2				
4. Assignment s Mark for Re (1) Points	tatements can conti view	inue over severa	l lines in PL/S0	QL. True or False?
True (*)				
False				

Incorrect. Refer to Section 2. Examine the following code. What is the final value of V\_MYBOOL? \_...,number NUMBER; v\_mybool BOOLEAN ; BEGIN v\_mynumber NUMBER; (1) Points True (\*) False Section 2 You need to declare a variable to hold a value which has been read from the SALARY column of the EMPLOYEES table. Which of the following is an advantage of declaring the variable as: employees.salary%TYPE?

Mark for Review (1) Points

```
It is shorter than coding NUMBER(8,2)
If the SALARY column is ALTERed later, the PL/SQL code need not be changed. (*)
It executes much faster than using NUMBER(8,2)
It allows the software to perform implicit data type conversions.
Incorrect. Refer to Section 2.
what will be displayed when the following code is executed?
   varA NUMBER := 12;
BEGIN
   DECLARE
      varB NUMBER := 8;
    BEGIN
      varA := varA + varB;
   DBMS_OUTPUT.PUT_LINE(varB);
       Mark for Review
(1) Points
```

Page 288

8 12 Nothing, the block will fail with an error (\*) 20 VarB Incorrect. Refer to Section 2.  $\frac{1}{1}$  are meant to store large amounts of data. Mark for Review

Variables
Scalar data types
LOBs (*)
Incorrect. Refer to Section 2.
9. Which of the following are valid identifiers? (Choose two.) Mark for Review (1) Points
(Choose all correct answers)

yesterday (*)
yesterday's date
number_of_students_in_the_class
v\$testresult (*)
#students
Incorrect. Refer to Section 2.

10. You declare an implicit cursor in the DECLARE False? Mark for Review (1) Points	E section of a PL/SQL block. True o	o r
True		
False (*) Section 3		
11. Which rows will be deleted from the EMPLOYEES executed? DECLARE salary employees.salary%TYPE := 12000; BEGIN DELETE FROM employees WHERE salary > salary; END; Mark for Review (1) Points	S table when the following code is	
All rows whose SALARY column value is greater	r than 12000.	
All rows in the table.		

No rows. (*)
All rows whose SALARY column value is equal to 12000.
Incorrect. Refer to Section 3.
12. Which of the following best describes a database transaction? Mark for Review (1) Points
All the DML statements in a single PL/SQL block
A related set of SQL DML statements which must be executed either completely or no at all (*)
A single SQL statement that updates multiple rows of a table

```
PLSQL feedback final exam semister 1
```

A SELECT statement based on a join of two or more database tables

Incorrect. Refer to Section 3.

Section 4

```
13.
What will happen when the following code is executed?
BEGIN
FOR i in 1 ..3 LOOP
     DBMS_OUTPUT.PUT_LINE (i);
     i := i + 1;
END LOOP;
END;     Mark for Review
(1) Points
```

It will display 1, 2, 3.

```
It will display 2, 3, 4.
```

It will result in an error because you cannot modify the counter in a FOR loop. (\*)

It will result in an error because the counter was not explicitly declared.

Incorrect. Refer to Section 4.

```
14.
What will be the value of v_result after the following code is executed?
DECLARE
    v_grade CHAR(1) := NULL;
    v_result VARCHAR2(10);
BEGIN
    CASE v_grade
        WHEN 'A' THEN v_result := 'Very Good';
        WHEN 'F' THEN v_result := 'Poor';
        ELSE v_result := 'In Between';
    END;
END; Mark for Review
(1) Points
```

```
Poor
```

```
In Between (*)
```

Null

Very Good

Incorrect. Refer to Section 4.

```
5
6
4 (*)
This is an infinite loop; the loop will never finish.
Section 4
```

```
16.
Examine the following code:
DECLARE
    a VARCHAR2(6) := NULL;
    b VARCHAR2(6) := NULL;
BEGIN
    If a = b THEN
        DBMS_OUTPUT.PUT_LINE('EQUAL');
    ELSIF a != b THEN
        DBMS_OUTPUT.PUT_LINE('UNEQUAL');
    ELSE
        DBMS_OUTPUT.PUT_LINE('OTHER');
    END IF;
END;
Which word will be displayed? Mark for Review
(1) Points
```

UNEQUAL

```
PLSQL feedback final exam semister 1
```

Nothing will be displayed

OTHER (\*)

**EQUAL** 

Incorrect. Refer to Section 4.

```
17.
Examine the following code:
BEGIN
FOR i IN 1..5 LOOP
FOR j IN 1..8 LOOP
EXIT WHEN j = 7;
DBMS_OUTPUT.PUT_LINE(i || j);
END LOOP;
END LOOP;
END;
How many lines of output will be displayed when this code is executed? Mark for Review
(1) Points
Mark for
```

	PLSQL	feedback	final	exam	semister	1			
6									
30 (*)									
40									
Incorrect. Refer to Se	ction 4.								
Section 5									
18. Which of these statement (1) Points	nts abou	ıt implic	it cur	sors <sup>-</sup>	is NOT tr	ue?	Mark	for	Review

They are declared automatically by Oracle for single-row SELECT statements.

They are declared automatically by Oracle for all DML statements.

They are declared by the PL/SQL programmer. (\*)

They are opened and closed automatically by Oracle.

Incorrect. Refer to Section 5.

19.
What is one of the advantages of using parameters with a cursor? Mark for
Review
(1) Points

You can use a cursor FOR loop.

You can declare the cursor FOR UPDATE.

You do not need to DECLARE the cursor at all.

You can use a single cursor to fetch a different set of rows each time the cursor is opened. (\*)

It will execute much faster than a cursor without parameters.

Incorrect. Refer to Section 5.

20. Which of the following Mark for Review (1) Points	cursor	attribut	tes evalu	iates 1	to TRUE	if th	ie curso	r is	open?
%ISOPEN (*)									
ALSOFEN ( )									
%NOTFOUND									
%FOUND									
%ROWCOUNT									
Section 5									
21.									
When using a cursor FOI explicitly coded. True (1) Points	R loop, or Fals	OPEN, CL se?	OSE and Mark	FETCH for Re	stateme eview	ents s	should n	ot b	e

```
PLSQL feedback final exam semister 1
True (*)
False
Incorrect. Refer to Section 5
22.
A cursor is declared as:
CURSOR c IS SELECT * FROM departments FOR UPDATE;
After opening the cursor and fetching some rows, you want to delete the most recently fetched row. Which of the following will do this successfully?
Mark for Review
(1) Points
DELETE FROM C WHERE CURRENT OF C;
DELETE FROM departments WHERE CURRENT OF c; (*)
DELETE FROM c WHERE CURRENT OF departments;
```

		PLSQL	feedback	final (	exam s	semist	er 1		
DELETE FROM	departments	WHERE	c%ROWCOUI	NT = 1;					
None of the	above.								
Incorrect.	Refer to Sect	cion 5.							
22									
23. How many ex Mark for Re (1) Points	plicit curso view	rs can	be decla	red and	used	in a	single	PL/SQL	block?
One or two.									
Only one.									
As many as	needed. (*)								

```
PLSQL feedback final exam semister 1
```

Up to eight cursors.

None of the above.

Incorrect. Refer to Section 5.

Section 6

```
24.
Examine the following code. What is the scope and visibility of the outer block's v_last_name?
DECLARE
    v_last_name VARCHAR2(20);
BEGIN
    DECLARE
    v_last_name VARCHAR2(20);
BEGIN
    END:
    END:
    Mark for Review
(1) Points
```

```
It is in scope and visible in both blocks.
It is in scope and visible in the outer block only.
It is in scope in both blocks, but visible only in the outer block. (*)
It is visible in both blocks, but in scope only in the outer block.
Incorrect. Refer to Section 6.
There are no employees in department 99. What message or messages will be displayed
when the following code is executed?
DECLARE
    e_my_excep EXCEPTION;
BEGIN
    BEGIN
       UPDATE employees SET salary = 10000
WHERE department_id = 99;
IF SQL%ROWCOUNT = 0 THEN
          RAISE e_my_excep;
       END IF;
    EXCEPTION
       WHEN e_my_excep THEN
                                          Page 305
```

```
PLSQL feedback final exam semister 1
           DBMS_OUTPUT.PUT_LINE('Message 1');
           RAISE e_my_excep;
           DBMS_OUTPUT.PUT_LINE('Message 2');
    END;
    DBMS_OUTPUT.PUT_LINE('Message 3');
EXCEPTION
    WHEN e_my_excep THEN
DBMS_OUTPUT.PUT_LINE('Message 4');
          Mark for Review
END;
(1) Points
Message 1
Message 3
Message 1
Message 2
Message 1
Message 3
Message 4
Message 1
Message 4
Section 6
Which of the following are good practice guidelines for exception handling? (Choose three.) Mark for Review
(1) Points
```

(Choose all correct answers)
Test your code with different combinations of data to see what potential errors car happen. (*)
Use an exception handler whenever there is any possibility of an error occurring. (*)
Include a WHEN OTHERS handler as the first handler in the exception section.
Allow exceptions to propagate back to the calling environment.
Handle specific named exceptions where possible, instead of relying on WHEN OTHERS. (*)
Incorrect. Refer to Section 6.

27. Which of the three.) (1) Points	following are example Mark for Review	s of	predefin	ed Oracle	Server	errors?	(Choose
(Choose all c	orrect answers)						
TOO_MANY_ROWS	(*)						
NO_DATA_FOUND	(*)						
OTHERS							
ZERO_DIVIDE (	*)						
E_INSERT_EXCE	Р						

Incorrect. Refer to Section 6.

Section 7

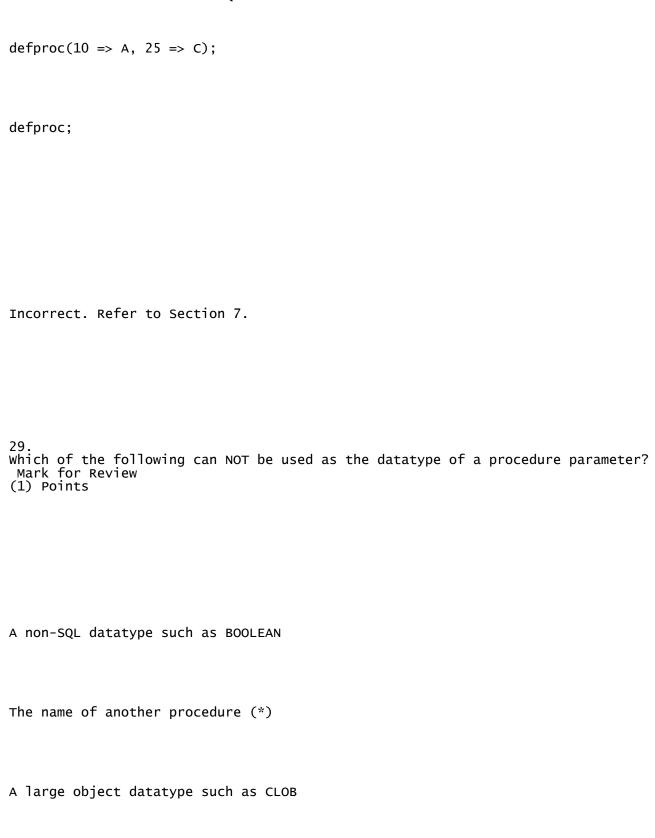
```
28.
The following procedure has been created:
CREATE OR REPLACE PROCEDURE defproc
(A IN NUMBER := 50,
B IN NUMBER,
C IN NUMBER DEFAULT 40)
IS .....
Which one of the following will invoke the procedure correctly?
Mark for Review
(1) Points
```

 $defproc(30 \Rightarrow A);$ 

 $defproc(30, 60 \Rightarrow C);$ 

defproc(40, 70); (\*)

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A PLSQL record defined using %ROWTYPE

Incorrect. Refer to Section 7.

The following are the steps involved in creating, and later modifying and re-creating, a PL/SQL procedure in Application Express. In what sequence should these steps be performed? Retrieve the saved code from "Saved SQL" in SQL Commands
Execute the code to create the procedure
Execute the code to re-create the procedure
Click on the "Save" button and save the procedure code
Modify the code in the SQL Commands window
Type the procedure code in the SQL Commands window Α. В. С. D.

E.

Mark for Review (1) Points

F,C,A,B,E,D

30.

F,B,D,A,E,C (\*)

E,D,F,C,A,B

F,B,D,E,A,C
F,B,C,D,E,A Section 8
31. How do you specify that you want a procedure MYPROCA to use Invoker's Rights? Mark for Review (1) Points
CREATE OR REPLACE PROCEDURE myproca AUTHID CURRENT_USER IS (*)
Invoker's Rights are the default, therefore no extra code is needed.
GRANT INVOKER TO myproca;
ALTER PROCEDURE myproca TO INVOKER;
CREATE OR REPLACE PROCEDURE myproca AUTHID OWNER IS

Incorrect. Refer to Section 8.	
32. In which DML statements can user-defined functions be used? (1) Points	Mark for Review
INSERT and UPDATE, but not DELETE.	
INSERT only.	
All DML statements. (*)	
UPDATE only	
DELETE only	

Incorrect.	Refer	to	Section	8.
------------	-------	----	---------	----

Which of the following is a difference between a procedure and a function?

Mark for Review

(1) Points

Functions cannot be nested; procedures can be nested to at least 8 levels.

A procedure can have default values for parameters, while a function cannot.

An explicit cursor can be declared in a procedure, but not in a function.

A function cannot be used within a SQL statement; a procedure can be used within SQL.

A function must return a value, a procedure may or may not. (\*)

Incorrect. Refer to Section 8.
34. You want to remove the procedure NO_NEED from your schema. You execute: DROP PROCEDURE no_need; Which Data Dictionary views are updated automatically? Mark for Review (1) Points
USER_PROCEDURES
USER_OBJECTS
USER_SOURCE
All of the above. (*)
None of the above.

Incorrect. Refer to Section 8.
Section 9
35. Why is it better to use DBMS_OUTPUT only in anonymous blocks, not inside stored subprograms such as procedures? Mark for Review (1) Points
Because DBMS_OUTPUT cannot be used inside procedures
Because anonymous blocks display messages while the block is executing, while procedures do not display anything until their execution has finished
Because DBMS_OUTPUT should be used only for testing and debugging PL/SQL code (*) Page 316

Because DBMS\_OUTPUT can raise a NO\_DATA\_FOUND exception if used inside a packaged procedure Section 10 41. What is wrong with the following code? CREATE OR REPLACE TRIGGER loc\_trigg BEFORE DELETE ON locations **BEGIN** RAISE\_APPLICATION\_ERROR(-20201, 'Invalid delete'); ROLLBACK; Mark for Review END; (1) Points The last line should be: END loc\_trigg; You cannot use RAISE\_APPLICATION\_ERROR inside a trigger. The second line should be: BEFORE DELETE OF locations You cannot use ROLLBACK inside a trigger. (\*)

```
PLSQL feedback final exam semister 1
Nothing is wrong, this trigger will compile and execute successfully.
Incorrect. Refer to Section 10.
42.
Examine the following code:
CREATE TRIGGER emp_trigg
AFTER UPDATE OF salary ON employees
FOR EACH ROW
DECLARE
    v_count NUMBER;
BEGIN
    -- Line A
which of the following statements is NOT allowed at Line A? Mark for Review
(1) Points
SELECT count(*) INTO v_count FROM departments;
UPDATE employees SET job_id = 'IT_PROG' WHERE employee_id = :OLD.employee_id;
SELECT count(*) INTO v_count FROM employees; (*)
```

PLSQL feedback final exam semister 1
DBMS_OUTPUT.PUT_LINE('A salary was updated');
None. All of the above are allowed.
Incorrect. Refer to Section 10.
43. Which dictionary view shows the detailed code of a trigger body? Mark for Review (1) Points
USER_SOURCE
USER_TRIGGERS (*)
USER_OBJECTS

USER_DML_TRIGGERS	PLSQL feedback fir	nal exam semiste	er 1	
USER_SUBPROGRAMS				
Incorrect. Refer to Sec	tion 10.			
44. A business rule states less than O. The best w (1) Points	that an employee's ay to enforce this	salary cannot b rule is by usin	e greater than g: Mark fo	99,999.99 or r Review
A datatype of NUMBER(7,	2) for the SALARY (	column		
A database trigger				

A check constraint (\*)

```
An application trigger
A view
Incorrect. Refer to Section 10.
There are 3 employees in department 90 and 5 employees in department 50. The following trigger has been created:

CREATE TRIGGER upd_emp_trigg
AFTER UPDATE ON employees
FOR EACH ROW
BEGIN
A user now executes:

UPDATE employees SET department_id = 50

WHERE department_id = 90;

How many times will the trigger fire? Mark for Review
(1) Points
Once
Three times (*)
```

Four times Five times Eight times Section 11 A PL/SQL package named MYPACK declares a record type named MYTYPE as a public variable in the package specification. Which of the following anonymous blocks successfully declares a local variable of datatype MYTYPE?

Mark for Review (1) Points v\_myrec IS RECORD mypack.mytype; BEGIN ... DECLARE v\_myrec mypack.mytype; BEGIN ... (\*) DECLARE v\_myrec mytype;
BEGIN ...

```
DECLARE
   v_myrec IS RECORD (mypack.mytype);
BEGIN ...
Incorrect. Refer to Section 11.
47.
Examine the following code:
DECLARE
    CURSOR emp_curs IS
    SELECT employee_id, first_name, last_name FROM employees; TYPE t_mytype IS TABLE OF -- Point A
       INDEX BY BINARY_INTEGER;
v_mytab t_mytype;
Which of the following can be coded at Point A? Mark for Review
(1) Points
employees%ROWTYPE
employees.salary%TYPE
emp_curs%ROWTYPE
```

Any one of the above (*)
None of the above
Incorrect. Refer to Section 11.
48. The database administrator has created a directory as follows: CREATE DIRECTORY filesdir AS 'C:\BFILEDIR'; How would the DBA allow all database users to query the BFILEs in this directory? Mark for Review (1) Points
GRANT READ ON filesdir TO PUBLIC;
GRANT READ ON DIRECTORY filesdir TO PUBLIC; (*)
GRANT SELECT ON filesdir TO PUBLIC;

GRANT QUI	ERY ON DIRECTO	RY filesdir TC	O PUBLIC;				
GRANT REA	AD ON 'C:\BFIL	EDIR' TO PUBLI	īC;				
Incorrec	t. Refer to Se	ction 11.					
49. Which of Mark fo (1) Poin	the following Review ts	methods can b	oe used to	query CLO	B data va	lues? (Ch	oose two.
(Choose a	all correct and	swers)					
SELECT (	*)						

```
PLSQL feedback final exam semister 1
DBMS_LOB.PUT
DBMS_LOB.GETLENGTH
DBMS_LOB.READ (*)
Incorrect. Refer to Section 11.
```

Section 12

```
50.
Examine the following code:
CREATE FUNCTION deptfunc
RETURN NUMBER IS
    v_count NUMBER(6);
BEGIN
    SELECT COUNT(*) INTO v_count FROM departments;
    RETURN v_count;
END;
Which of the following will display the dependency between DEPTFUNC and DEPARTMENTS?
    Mark for Review
    Page 326
```

### (1) Points

```
SELECT name, type
FROM user_dependencies
WHERE name IN ('DEPTFUNC', 'DEPARTMENTS');

SELECT name, type, referenced_name, referenced_type
FROM user_dependencies
WHERE referenced_name = 'DEPARTMENTS'
AND referenced_type = 'TABLE';

(*)

SELECT name, type, referenced_name, referenced_type
FROM user_dependencies
WHERE name = 'DEPARTMENTS'
AND type = 'TABLE';

SELECT object_name, object_type
FROM user_objects
WHERE object_name IN ('DEPARTMENTS', 'DEPTFUNC')
AND referenced = 'YES';
```