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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

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

   True (*)

   False

   Correct

2. 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 (*)

   Correct

3. 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

4. The P in PL/SQL stands for: Mark for Review
(1) Points

   Processing

   Procedural (*)

Page 1
5. 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

6. 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. (*)

Correct

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 (*)

Correct

8. Which PL/SQL block type must return a value?  Mark for Review
(1) Points
9. Which keywords must be included in every PL/SQL block? (Choose two.) Mark for Review
(1) Points
(Choose all correct answers)
DECLARE
END; (*)
EXCEPTION
BEGIN (*)
DBMS_OUTPUT.PUT_LINE

Incorrect. Refer to Section 1.

10. 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
PL/SQL feedback of midterm exam semester 1 part 1

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

11. In which part of the PL/SQL block are declarations of variables defined? Mark for Review (1) Points
   Executable
   Exception
   Declarative (*)
   Definition

   Correct

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

13. Errors are handled in the Exception part of the PL/SQL block. True or False? Mark for Review (1) Points
   True (*)
   False

   Correct

Section 2

14. A variable must have a value if NOT NULL is specified. True or False? Mark for Review (1) Points
   True (*)
PLSQL feedback of midterm exam semester 1 part1

False

Correct

15. 1. Null
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

16. If you are using the %TYPE attribute, you can avoid hard coding the:
Mark for Review
(1) Points
Data type (*)
Table name
Column name
Constraint

Correct

17. Which of the following are valid identifiers? (Choose two.)
Mark for Review
(1) Points
(Choose all correct answers)
Full Name
students_street_address (*)
v_code (*)
#hours
completion_%

Correct

18. Which of the following are valid identifiers? (Choose two.)
Mark for Review
PLSQL feedback of midterm exam semester 1 part1

(1) Points
(Choose all correct answers)
  yesterday (*)
  yesterday's date
  number_of_students_in_the_class
  v$testresult (*)
  #students

Correct

19. Reserved words can be used as identifiers. True or False? Mark for Review
(1) Points
  True
  False (*)

Correct

20. 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
three.) Mark for Review
(1) Points

(Choose all correct answers)

v_last_name := Chandra;

v_blackout_date := '31-DEC-2006'; (*)

v_population := 333444; (*)

v_music_type := 'ROCK'; (*)

Correct

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

True (*)

False

Correct

23. 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

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

(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.

Correct

25. A collection is a composite data type. True or False? Mark for Review
(1) Points

True (*)
26. A movie is an example of which category of data type? Mark for Review (1) Points
   Scalar
   Composite
   Reference
   LOB (*)
   Correct

27. Which of these are PL/SQL data types? (Choose three.) Mark for Review (1) Points
   (Choose all correct answers)
   Scalar (*)
   Identifier
   Delimiter
   Composite (*)
   LOB (*)
   Correct

28. 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
   Correct

29. 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
30. Examine the following code. Line A causes an exception. 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;
END;

Mark for Review
(1) Points

12 (*)
24
6

Nothing will be displayed

Correct
PLSQL feedback of midterm exam semester 1 part1

Oracle automatically tries to re-execute the inner block
The user's database session is automatically disconnected

Correct

32. What will be displayed when the following code is executed?
DECLARE
  x VARCHAR2(6) := 'Chang';
BEGIN
  DECLARE
    x VARCHAR2(12) := 'Susan';
    BEGIN
      x := x || x;
      END;
    DBMS_OUTPUT.PUT_LINE(x);
END;

Mark for Review
(1) Points

Susan
Chang (*)
ChangChang
SusanChang
The code will fail with an error

Correct

33. 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

34. What is wrong with this assignment statement?
myvar := 'To be or not to be';
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

35. 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

Correct

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

True (*)
False

Correct

37. Which of the following are disadvantages of implicit data type conversions? (Choose two.) Mark for Review
(1) Points
PLSQL feedback of midterm exam semester 1 part1

(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.

38. Examine the following code. What is the final value of V_MYVAR ?
DECLARE
  v_myvar NUMBER;
BEGIN
  v_myvar := 1 + 2 * 3;
  v_myvar := v_myvar * 2;
END;

Mark for Review
(1) Points
  81
  49
  14 (*)
  18

Correct

39. 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

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

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Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 3

41. 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 (*)
   
   Correct

42. The following anonymous block of code is run:
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.
PLSQL feedback of midterm exam semester 1 part1

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

43. 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

44. 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.

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

   True

   False (*)
PLSQL feedback of midterm exam semester 1 part 1

Correct

46. 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;

Correct

47. 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
48. Which rows will be deleted from the EMPLOYEES table when the following code is executed?

```plsql
DECLARE
    salary employees.salary%TYPE := 12000;
BEGIN
    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.

Correct

49. The following code will return the last name of the employee whose employee id is equal to 100: True or False?

```plsql
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

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

```sql
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;
```
Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

1. 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.

2. 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.

3. PL/SQL is an Oracle proprietary, procedural, 4GL programming language. True or False? Mark for Review
   (1) Points
   - True
   - False (*)

   Correct
4. 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

Incorrect. Refer to Section 1.

5. 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.

6. 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

7. 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
PLSQL feedback of midterm exam semester 1 part 1

3,4,2,1 (*)
3,2,4,1
4,3,2,1

Correct

8. Which lines of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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. Refer to Section 1.

9. 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

10. 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 (*)

Correct

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

1. 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.

2. 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.

3. PL/SQL is an Oracle proprietary, procedural, 4GL programming language. True or False? Mark for Review (1) Points
   - True
   - False (*)

   Correct

4. 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
PLSQL feedback of midterm exam semester 1 part1

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

Incorrect. Refer to Section 1.

5. 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.

6. 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

7. 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

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Correct

8. Which lines of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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. Refer to Section 1.

9. 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

10. 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 (*)

Correct
PLSQL feedback of midterm exam semester 1 part 1

Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

11. 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
   Object Browser

   Correct

12. 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.

13. 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.
PLSQL feedback of midterm exam semester 1 part1

Section 2

14. 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. (*)
The database name.

Correct

15. If you are using the %TYPE attribute, you can avoid hard coding the:

Mark for Review

(1) Points

Data type (*)
Table name
Column name
Constraint

Correct

16. 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;

Incorrect. Refer to Section 2.

17. Delimiters are _____ that have special meaning to the Oracle database. Mark for Review

(1) Points

identifiers
variables
symbols (*)

Incorrect. Refer to Section 2.
18. Which statements about lexical units are true? (Choose two.) Mark for Review

(1) Points
(Choose all correct answers)
- 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 (*)

Incorrect. Refer to Section 2.

19. Which of the following are valid identifiers? (Choose two.) Mark for Review

(1) Points
(Choose all correct answers)
- Full Name
- students_street_address (*)
- v_code (*)
- #hours
- completion_%

Incorrect. Refer to Section 2.

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

```plsql
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';
END;
Mark for Review
(1) Points
```

```
My
My name (*)
My name is
```

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PLSQL feedback of midterm exam semester 1 part1

My name is Zeynep

Incorrect. Refer to Section 2.

Section 2

21. What will be displayed when the following code is executed?

```sql
DECLARE
    x VARCHAR2(6) := 'Chang';
BEGIN
    DECLARE
        x VARCHAR2(12) := 'Susan';
    BEGIN
        x := x || x;
    END;
    DBMS_OUTPUT.PUT_LINE(x);
END;
```

Mark for Review

(1) Points

Susan
Chang (*)
ChangChang
Susanchang
The code will fail with an error

Correct

22. 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?

```sql
<<outer_block>>
DECLARE
    v_myvar NUMBER;
BEGIN
```

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PLSQL feedback of midterm exam semester 1 part1

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

Incorrect. Refer to Section 2.

23. 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.

24. What will be displayed when the following code is executed?

DECLARE
  varA NUMBER := 12;
BEGIN
  DECLARE
    varB NUMBER := 8;
  BEGIN
    varA := varA + varB;
  END;
  DBMS_OUTPUT.PUT_LINE(varB);
END;

Mark for Review
(1) Points

8
12
Nothing, the block will fail with an error (*)
20
VarB
25. 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

26. Is the following variable declaration correct or not?
   DECLARE
   display_qty CONSTANT NUMBER
   Mark for Review
   (1) Points
   Correct.
   Not correct. (*)
   Correct

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

28. 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

29. Variables can be used in the following ways in a PL/SQL block. (Choose two.) Mark for Review
(1) Points
   (Choose all correct answers)
   To store data values. (*)
   To rename tables and columns.
30. 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
Incorrect. Refer to Section 2.

31. Examine the following code. What is the final value of V_MYBOOL?
DECLARE
v_mynumber NUMBER;
v_mybool BOOLEAN;
BEGIN
v_mynumber := 6;
v_mybool := (v_mynumber BETWEEN 10 AND 20);
v_mybool := NOT (v_mybool);
END;
Mark for Review
(1) Points
True (*)
False
Incorrect. Refer to Section 2.

32. Examine the following code. What is the final value of V_MYVAR?
DECLARE
Page 29
33. What is wrong with this assignment statement?
myvar := 'To be or not to be';

'That is the question';

Mark for Review
(1) Points
81
49
14 (*)
18

Correct

34. 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

Incorrect. Refer to Section 2.

35. Which of the following are valid assignment statements? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)
PLSQL feedback of midterm exam semester 1 part 1

36.  What is the output when the following program is executed?

```sql
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

  Correct
```

37.  If today's date is 14th June 2007, which statement will correctly convert today's date to the value: June 14, 2007 ?  Mark for Review

(1) Points

```sql
TO_CHAR(sysdate)
TO_DATE(sysdate)
TO_DATE(sysdate,'Month DD, YYYY')
TO_CHAR(sysdate, 'Month DD, YYYY') (*)
```

  Correct

38.  A movie is an example of which category of data type?  Mark for Review

(1) Points

Scalar
39. Which of these are PL/SQL data types? (Choose three.) Mark for Review (1) Points
(Choose all correct answers)
Scalar (*)
Identifier
Delimiter
Composite (*)
LOB (*)

Correct

40. 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

Correct
Section 3

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
   Incorrect. Refer to Section 3.

42. The following anonymous block of code is run:
   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. (*)
   Incorrect. Refer to Section 3.

43. Which rows will be deleted from the EMPLOYEES table when the following code is executed?
   DECLARE
   salary employees.salary%TYPE := 12000;
   BEGIN
   DELETE FROM employees
   WHERE salary > salary;
   END;

   Mark for Review
   (1) Points
   All rows whose SALARY column value is greater than 12000.
PLSQL feedback of midterm exam semester 1 part1
All rows in the table.
No rows. (*)
All rows whose SALARY column value is equal to 12000.
Incorrect. Refer to Section 3.

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?
(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;

Correct

45. 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.

46. 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.

47. 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
48. Which is the correct way to erase one row from a table? Mark for Review
(1) Points

REMOVE employee_id=100
FROM employees;

DROP TABLE employees
WHERE employee_id=100;

TRUNCATE employees
WHERE employee_id=100;

DELETE FROM employees
WHERE employee_id=100;
(*)

Correct

49. 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.

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

True

False (*)

Incorrect. Refer to Section 3.
Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 1

1. 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 (*)

   Correct

2. 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.

3. PL/SQL is an Oracle proprietary, procedural, 4GL programming language. True or False? Mark for Review (1) Points
   True
4. 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.

5. 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  
   Incorrect. Refer to Section 1.

6. 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  
   Incorrect. Refer to Section 1.

7. 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
8. 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.

9. Which statements are optional in a PL/SQL block? (Choose two.) Mark for Review
   (1) Points
   (Choose all correct answers)
   DECLARE (*)
   BEGIN
   EXCEPTION (*)
   END;

   Incorrect. Refer to Section 1.

10. Errors are handled in the Exception part of the PL/SQL block. True or False? Mark for Review
    (1) Points
    True (*)
    False

    Correct
Section 1

11. Which lines of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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. 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

Incorrect. Refer to Section 1.

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

14. Which of these are PL/SQL data types? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)
   Scalar (*)
   Identifier
15. 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.

Incorrect. Refer to Section 2.

16. 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

Correct

17. 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

Correct

18. What will be displayed when the following code is executed?

DECLARE
    x VARCHAR2(6) := 'Chang';
BEGIN
    DECLARE
        x VARCHAR2(12) := 'Susan';
PLSQL feedback of midterm exam semester 1 part 1

BEGIN
  x := x || x;
END;
DBMS_OUTPUT.PUT_LINE(x);
END;

Mark for Review
(1) Points
Susan
Chang (*)
ChangChang
SusanChang
The code will fail with an error

Incorrect. Refer to Section 2.

19. 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.
(*)
Correct

20. 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
    DBMS_OUTPUT.PUT_LINE(outer_var);
END;
Mark for Review
(1) Points
My
My name (*)
Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 2

21. Examine the following code. Line A causes an exception. What will be displayed when the block is executed?

```plsql
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.

22. Which of the following should NOT be used as the name of a variable? Mark for Review

(1) Points

A table name.
PLSQL feedback of midterm exam semester 1 part1

A table column name. (*)
The database name.

Incorrect. Refer to Section 2.

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. A variable must have a value if NOT NULL is specified. True or False? Mark for Review
   (1) Points
   True (*)
   False

   Incorrect. Refer to Section 2.

25. 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

   Incorrect. Refer to Section 2.

26. Which of the following are valid identifiers? (Choose two.) Mark for Review
   (1) Points
   (Choose all correct answers)
   Full Name
PLSQL feedback of midterm exam semester 1 part1

students_street_address (*)
v_code (*)
#hours
completion_%

Incorrect. Refer to Section 2.

27. 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.

28. 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

Incorrect. Refer to Section 2.

29. 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
PLSQL feedback of midterm exam semester 1 part 1

(1) Points
'300'
300 (*)
NULL

Correct

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

Incorrect. Refer to Section 2.

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Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 2

21. Examine the following code. Line A causes an exception. 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 (*)

Page 46
22. 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. (*)
The database name.

Incorrect. Refer to Section 2.

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. A variable must have a value if NOT NULL is specified. True or False? Mark for Review
(1) Points
True (*)
False

Incorrect. Refer to Section 2.

25. 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 (*)

Page 47
26. Which of the following are valid identifiers? (Choose two.) Mark for Review (1) Points

(Choose all correct answers)
Full Name
students_street_address (*)
v_code (*)
#hours
completion_%

Incorrect. Refer to Section 2.

27. 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.

28. 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. (*)
PLSOL feedback of midterm exam semester 1 part 1
V_MYDATE has been entered in uppercase

Incorrect. Refer to Section 2.

29. 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

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

Incorrect. Refer to Section 2.
32. 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

Incorrect. Refer to Section 2.

33. 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. Refer to Section 2.

34. Single row character functions are valid SQL functions in PL/SQL. True or False? Mark for Review
(1) Points
True (*)
False
35. If today's date is 14th June 2007, which statement will correctly convert today's date to the value: June 14, 2007? Mark for Review
(1) Points

TO_CHAR(sysdate)
TO_DATE(sysdate)
TO_DATE(sysdate,'Month DD, YYYY')
TO_CHAR(sysdate, 'Month DD, YYYY') (*)

Incorrect. Refer to Section 2.

36. Is the following variable declaration correct or not?
DECLARE
display_qty CONSTANT NUMBER;
Mark for Review
(1) Points

Correct.

Not correct. (*)

Incorrect. Refer to Section 2.

37. 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

38. 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

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

(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.

Correct

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

True (*)

False

Correct

Page 4 of 5

Test: Mid Term Exam Semester 1 - Part I

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

The Mid Term Exam for Semester 1 is presented to you as two exams. This is Part I of the Mid Term Exam for Semester 1.

Section 3

41. 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.
42. 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

43. You declare an implicit cursor in the DECLARE section of a PL/SQL block. True or False?  Mark for Review
(1) Points
True
False (*)
Incorrect. Refer to Section 3.

44. 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.

45. 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.
PLSQL feedback of midterm exam semester 1 part1

THE SELECT statement should fetch exactly one row.

Incorrect. Refer to Section 3.

46. 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.

47. 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
48. 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;

    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.

49. 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 (*)

    Correct

50. The following anonymous block of code is run:
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. (*)

Incorrect. Refer to Section 3.

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

True (*)

False
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 (*)

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)

Page 56
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

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. (*)

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.

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.

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
PLSQL feedback of midterm exam semester 1 part1

A program developed in C

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)

Unnamed (*)

Stored in the database

Compiled each time the application is executed (*)

Can be declared as procedures or as functions
PL/SQL feedback of midterm exam semester 1 part 1

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 (*)

In a PL/SQL block, which of the following should not be followed by a semicolon?

Mark for Review

(1) Points
PLSQL feedback of midterm exam semester 1 part1

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 statement? Mark for Review
(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

&

%

$

* (*)

The concatenation operator ...

(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 displaying any duplicates? Mark for Review
(1) Points

SELECT ALL department_id
FROM employees;

SELECT department_id
FROM employees;

SELECT department_id
FROM employees
having ROWID=1;
PLSQL feedback of midterm exam semester 1 part 1

```sql
SELECT DISTINCT department_id
FROM employees;

(*)

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;
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

(Choose all correct answers)

WHERE salary >= 2500 AND salary <= 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

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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

(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_number regular_code
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 ' ||
PLSQL feedback of midterm exam semester 1 part1

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;

Which of the following statements displays 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
The following SQL statement will display the value: 456. True or False?

```sql
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

```sql
SELECT CONCAT (employee_id, SUBSTR(last_name,4,1))
AS "User Passwords"
FROM employees;
```

```sql
SELECT CONCAT (employee_id, INSTR(last_name,4,1))
AS "User Passwords"
FROM employees;
```

```sql
SELECT CONCAT (employee_id, INSTR(last_name,1,4))
AS "User Passwords"
FROM employees;
```

```sql
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

```sql
SELECT TRUNC(MONTHS_BETWEEN(SYSDATE,'19-MAR-79') /12)
AS YEARS
FROM DUAL;
```

(*)

```sql
SELECT TRUNC(YEARS_BETWEEN(SYSDATE,'19-MAR-79') /12)
```

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AS YEARS
FROM DUAL;

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
What is returned by the following statement?

```sql
SELECT CONCAT('Today is','Thursday!') FROM DUAL;
```

1) Points

Today is Thursday!

Today is Thursday! (*)
today is thursday!

Today is Thursday!

What does the following SQL SELECT statement return?

```sql
SELECT UPPER(SUBSTR('Database Programming', INSTR('Database Programming','P'),20)) FROM dual;
```

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

```sql
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);

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
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');
PLSQL feedback of midterm exam semester 1 part 1

v_today := format_todays_date(v_today);

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
(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? Mark for Review
(1) Points

? ?

 */ /*

:: ::

/* */ (*)

What are the data types of the variables in the following declaration?

DECLARE
fname VARCHAR2(20);
fname VARCHAR2(15) DEFAULT 'fernandez';
BEGIN
...

(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 (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
PLSQL feedback of midterm exam semester 1 part1

Use column names as identifiers (*)

Use NOT NULL when the variable must have a value

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;

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.
PLSQL feedback of midterm exam semester 1 part1
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 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 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;
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:

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

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.

```sql
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?

```sql
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
PL/SQL feedback of midterm exam semester 1 part 1

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.

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

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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

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 Incorrect. Refer to Section 2.

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
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;

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

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PLSQL feedbak of midterm exam semester 1 part1
The TO_CHAR function is used for explicit data type conversions. True or False? 
Mark for Review 
(1) Points

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.)

(Choose all correct answers)

- Concatenation (*)
- Exception
- Exponential (*)
- Arithmetic (*)

Which of the following statements about implicit conversions is NOT true?

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?

TO_NUMBER (*)

Examine the following block. What should be coded at Line A?

DECLARE
v_char VARCHAR2(8) := '24/09/07';
BEGIN
v_date := ....... Line A
END;

v_date := FROM_CHAR(v_char,'dd/mm/yy');
PL/SQL feedback of midterm exam semester 1 part 1

v_date := TO_DATE(v_char,'dd/mm/yy'); (*)

v_date := v_char;

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

True (*)

False

Incorrect Incorrect. Refer to Sectio

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 Sectio

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

Explicit

Implicit (*)

TO_CHAR

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. (*)

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

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'; (*)

What happens when an exception occurs in the executable section of a PL/SQL block?  Mark for Review
(1) Points

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

What is wrong with this code?

Examine the following code. At Line A, we want to assign a value of 25 to the outer
PLSQL feedback of midterm exam semester 1 part 1
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;
    END;
  -- 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 A.

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;
    END;
  -- 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;
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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_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;
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

12

8

4 (*)
Examine the following code. Line A causes an exception. What will be displayed when
the block is executed?

DECLARE
  x NUMBER := 10;
  y NUMBER;
BEGIN
  x := 15;
  y := 'Happy'; -- Line A
  x := 20;
EXCEPTION
  WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(x);
END;

Mark for Review
(1) Points

10

20

15 (*)

Nothing is displayeExamine the following code. Line A causes an exception. What will be displayed when the block is executed?

DECLARE
  x NUMBER := 10;
  y NUMBER;
BEGIN
  x := 15;
  y := 'Happy'; -- Line A
  x := 20;
EXCEPTION
  WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(x);
END;

Mark for Review
(1) Points

10

20
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15 (*)

Nothing is displayed

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;
        END;
    END;
    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 column of the table. True or False? Mark for Review
(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. (*)

The statement will fail because it contains a syntax error.

The row with EMPLOYEE_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 (*)

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.
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The block will execute successfully, and the V_SALARY variable will be set to NULL.

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 Incorrect. Refer to Section 3.

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
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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
PLSQL feedback of midterm exam semester 1 part 1

INSERT and UPDATE only.

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

aardvarks and cool cats (*)

aardvarks, big birds and cool cats

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. (*)

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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.

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';
END IF;
DBMS_OUTPUT.PUT_LINE(mature);

What will be displayed when this code is executed? Mark for Review (1) Points

child

teenager

adult (*)
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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;

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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

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
PLSQL feedback of midterm exam semester 1 part1

WHEN 90 THEN 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_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 Incorrect. Refer to Section 4.

How must you end a CASE expression? Mark for Review
(1) Points

END; (*)

ENDIF;

END CASE;

ENDCASE;

Examine the following code:
DECLARE
  v_score NUMBER(3);
  v_grade CHAR(1);
BEGIN
  CASE v_score
    -- Line A
    ....
    ....
  END CASE;
END;

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:

```plsql
DECLARE
  v_a BOOLEAN;
  v_b BOOLEAN := FALSE;
  v_c BOOLEAN ;
BEGIN
  v_c := (v_a 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

How must you end a CASE statement?
Mark for Review
(1) Points

END;

END CASE; (*)

END IF;

ENDCASE;

Which kind of loop is this?

```plsql
i := 10;
LOOP
  i := i + 1;
  EXIT WHEN i > 30;
END LOOP;
```

Mark for Review
(1) Points

A FOR loop.

A WHILE loop.
PLSQL feedback of midterm exam semester 1 part1

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. (*)

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

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

- Updating the salary of one employee.
PLSQL feedback of midterm exam semester 1 part 1

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
  LOOP
    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);
BEGIN
  LOOP
    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
PLSQL feedback of midterm exam semester 1 part1

10 (*)

11

xxxxxxxxxxx

Look at this code:

DECLARE
  v_bool BOOLEAN := TRUE;
  v_date DATE;
BEGIN
  LOOP
    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);
END;

If today's date is 17th April 2007, what will be displayed when this block executes?

Mark for Review
(1) Points

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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 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
PLSQL feedback of midterm exam semester 1 part1

(1) Points

One

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:

```plsql
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:

```plsql
DECLARE
  v_blue NUMBER(3) := 0;
  v_red NUMBER(3) := 0;
BEGIN
  LOOP
    v_blue := v_blue + 1;
  END LOOP;
```

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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; (*)

What will be displayed when the following block is executed?:

DECLARE
x 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
PLSQL feedback of midterm exam semester 1 part1

The outer loop must be labelled if you want to exit the outer loop from within the inner loop (°)

Both loops can have the same label

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;
  END LOOP;
  DBMS_OUTPUT.PUT_LINE(i);
END;

(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?
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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.

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
```

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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.

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.

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
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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;
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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%');

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;
LOOP
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;
LOOP
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));
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?

(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?

(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?

(1) Points

%ISOPEN

%NOTFOUND

%FOUND (*)

%ROWCOUNT

How must you reference one field which is part of a PL/SQL record?

Mark for Review

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(1) Points

field_name.record_name

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?

BEGIN
FOR emp_record IN emp_cursor LOOP

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DBMS_OUTPUT.PUT_LINE(emp_record.last_name);
END LOOP;
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.

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;
BEGIN
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
PLSQL feedback of midterm exam semester 1 part 1

emp_record.employees.salary

TO_CHAR(salary)

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.
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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

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?

(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? (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) (*)

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?

```sql
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) (*)

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:

```sql
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:
PLSQL feedback of midterm exam semester 1 part 1

INSERT INTO table-name
WHERE CURRENT OF cursor_name;

(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 ... ;

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? (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? (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? (1) Points

Mark for Review

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(1) Points

FOR LOCK

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;?

(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.

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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.

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).

(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;
LOOP
  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?

(1) Points

OPEN country_cur (p_region_id);

OPEN country_cur (wf_world_regions.region_id);

OPEN country_cur (v_region_rec.region_id); (*)

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OPEN country_cur (region_cur.region_id);

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).

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

when another user tries to SELECT the rows.

Examine the following code:

DECLARE
  v_a BOOLEAN;
  v_b BOOLEAN := FALSE;
  v_c BOOLEAN;
BEGIN
  v_c := (v_a 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
  ....;
END;

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';
Look at this code:

DECLARE
  v_bool BOOLEAN := TRUE;
  v_date DATE;
BEGIN
  LOOP
    EXIT WHEN v_bool;
    SELECT SYSDATE INTO v_date FROM dual;
  END LOOP;
END;

How many times will the SELECT statement execute?

(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 Incorrect. Refer to Section 4.

Examine the following code:

DECLARE
  v_count NUMBER := 0;
  v_string VARCHAR2(20);
BEGIN
  LOOP
    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?

(1) Points

9

10 (*)
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.

1. 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.
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You can embed SQL statements within PL/SQL code. (*)

You can embed procedural constructs within SQL code.

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 Incorrect. Refer to Section 1.

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

   True (*)

   False

Incorrect Incorrect. Refer to Section 1.

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

   True (*)

   False

Correct Correct

2. 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
PLSQL feedbak of midterm exam semester 1 part1
Programs developed in Java or C, but not in PL/SQL. (*)

Incorrect Incorrect. Refer to Section 1.
3. 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.

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

   True (*)

   False

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

   True (*)

   False

Correct Correct
6. 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 (*)

1. Which of the following can be done using PL/SQL?  
   (Choose all correct answers)
   - Create complex applications.
   - Retrieve and modify data in Oracle database tables.
   - Manage database tasks such as security.
   - Create custom reports.

   All of the above (*)

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

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

   True
True (*)

False

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

True (*)

False

Correct Correct
5. 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 Incorrect. Refer to Section 1.
6. When multiple SQL statements are combined into PL/SQL blocks, performance improves. True or False? Mark for Review
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 1.
1. Which lines of code will correctly display the message "Hello World"? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

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DBMS_OUTPUT('Hello World');

DBMS_OUTPUT.PUT_LINE('Hello World'); (*)

DBMS_OUTPUT.PUT_LINE('Hello' || 'world');

DBMS_OUTPUT.PUT_LINE('Hello' || ' ' || 'world'); (*)

Incorrect Incorrect. Refer to Section 1.

9. What are the characteristics of an anonymous block? (Choose two.)
   (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 Correct

10. Which of the following is NOT a PL/SQL programming environment?

    (Choose all correct answers)

    Oracle jDeveloper

    SQL*Plus

    gSQL*Plus (*)

    SQL Workshop in Application Express

Correct Correct

3. Which statements are mandatory in a PL/SQL block? (Choose two.)

    (Choose all correct answers)
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BEGIN (*)

EXCEPTION

END; (*)

Incorrect Incorrect. Refer to Section 1.

4. 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 Incorrect. Refer to Section 1.

5. 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 Incorrect. Refer to Section 1.

6. Which of the following is NOT a PL/SQL programming environment? Mark for Review

(1) Points

Oracle jDeveloper
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SQL*Plus

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 >= 2500 AND salary <= 3500 (*)

WHERE salary <= 2500 AND salary >= 3500
PLSQL feedback of midterm exam semester 1 part1
WHERE salary BETWEEN 2500 AND 3500 (*)

WHERE BETWEEN salary = 2500 AND salary = 3500

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_number regularcode
FROM f_food_items;

Incorrect   Incorrect. Refer to Section 1.
3. 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   Incorrect. Refer to Section 1.
4. 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;

Incorrect Incorrect. Refer to Section 1.

5. 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;

Incorrect Incorrect. Refer to Section 1.

6. 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 (*)
Incorrect Incorrect. Refer to Section 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 Incorrect. Refer to Section 1.

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;
```

```
SELECT country_id, country_name, area
```
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FROM wf_countries
ORDER BY country_name;

SELECT country_id, country_name, area
FROM wf_countries
GROUP BY area;

Incorrect Incorrect. Refer to Section 1.
9. Which of the following statements displays 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;

Incorrect Incorrect. Refer to Section 1.
10. 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 || '.'

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FROM wf_countries;
(*)

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
(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 Incorrect. Refer to Section 1.
12. 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 Incorrect. Refer to Section 1.
13. What can you use to change the column heading of calculated values in a SQL
statement? Mark for Review
(1) Points
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 (*)

Correct

Database

DATABASE

What function would you use to return the highest date in a month?

```
SELECT TRUNC(MONTHS_BETWEEN(SYSDATE, '19-MAR-79') / 12)
FROM dual;
```

Mark for Review

(1) Points

FINAL_DAY

END_DAY

HIGHEST_DAY

LAST_DAY (*)

Which query would return a whole number if today's date is 26-MAY-04?

```
SELECT TRUNC(MONTHS_BETWEEN(SYSDATE, '19-MAR-79') / 12)
```

Mark for Review

(1) Points
PLSQL feedback of midterm exam semester 1 part1

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
AS YEARS
FROM DUAL;

None of the above

Incorrect Incorrect. Refer to Section 1.
4. 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 Incorrect. Refer to Section 1.
5. The following SQL statement will display the value: 456. True or False?
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
PLSQL feedback of midterm exam semester 1 part1

(1) Points

```sql
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;
```

(*)

Incorrect Incorrect. Refer to Section 1.

7. Which of the following is not a number function? Mark for Review

(1) Points

- TO_DATE (*)
- ROUND
- MOD
- TRUNC

Incorrect Incorrect. Refer to Section 1.

8. Assume that today is January 10, 2008. What would be the output of the following statement?

```sql
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
Incorrect Incorrect. Refer to Section 1.
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
(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 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

Today is Thursday!

Today is Thursday! (*)

today is thursday!
Incorrect Incorrect. Refer to Section 1.
12. Which function compares two expressions? Mark for Review (1) Points

NVL

NULLIF (*)

NVL2

NULL

Incorrect Incorrect. Refer to Section 1.
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
2. 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'); (*)

Incorrect Incorrect. Refer to Section 2.
3. Evaluate the following declaration. Determine whether or not it is legal.
PLSQL feedback of midterm exam semester 1 part1

DECLARE
    name, dept VARCHAR2(14);

Mark for Review
(1) Points

legal

illegal (*)

Correct Correct
4. Evaluate the following declaration. Determine whether or not it is legal.
DECLARE
    test NUMBER(5);  

Mark for Review
(1) Points

legal (*)

illegal

Correct Correct
5. Which of the following are required when declaring a variable? (Choose two.)
(1) Points

(Choose all correct answers)

Identifier name (*)

CONSTANT

Data type (*)

NOT NULL

Correct Correct
6. Constants must be initialized. True or False?
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 2.
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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 Incorrect. Refer to Section 2.

1. Which of the following symbols can be used to enclose a comment in PL/SQL? Mark for Review
(1) Points

```
? ?

*/ / *

:: ::

/** */ (*)
```

Incorrect 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 Correct

3. What is a lexical unit? Mark for Review
(1) Points

```
A data type for a column

A building block of a PL/SQL block (*)
```

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Correct

4. 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

5. 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

Incorrect

6. What characters must enclose non-numeric literal values? Mark for Review
   (1) Points

   Double quotes: " "

   Parentheses: ()

   Single quotes: ' ' (*)

Incorrect
1. A 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

   Incorrect Incorrect. Refer to Section 2.

2. A Scalar data type holds a ____ value. Mark for Review
   (1) Points
   
   Multi
   
   Large
   
   Single (*)

   Incorrect Incorrect. Refer to Section 2.

3. What are the data types of the variables in the following declaration?

   DECLARE
   fname VARCHAR2(20);
   fname VARCHAR2(15) DEFAULT 'fernandez';
   BEGIN
   ...
   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 (*)
5. 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 Incorrect. Refer to Section 2.

6. Which of the following are PL/SQL data types? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

Large Objects (LOB) (*)
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Lexical

Scalar (*)

Delimiter

Composite (*)

Incorrect Incorrect. Refer to Section 2.
1. If you use the %TYPE attribute, you can avoid hard-coding the column name. True or False? Mark for Review (1) Points

   True

   False (*)

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

   VARCHAR2

   BOOLEAN (*)

   CHAR

   LONG

Correct Correct
3. 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 (*)

Correct Correct
4. Which of the following is NOT a good guideline for declaring variables? Mark for Review
PLSQL feedback of midterm exam semester 1 part1

(1) Points

Declare one identifier per line

Use column names as identifiers (*)

Use NOT NULL when the variable must have a value

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

   True (*)

   False

Correct       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;

Correct       Correct
1. 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       Incorrect. Refer to Section 2.
2. A nonequijoin combines tables that have one or more exact matching columns. True or False? Mark for Review
(1) Points
PLSQL feedback of midterm exam semester 1 part1

True

False (*)

Incorrect Incorrect. Refer to Section 2.

3. 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

Correct Correct

4. Table aliases can be used to shorten the syntax in join statements. True or False? Mark for Review

(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 2.

5. 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.
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Yes, Oracle will resolve which department_id column comes from which table.

Correct Correct
6. 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.
7. 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;

(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
8. 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
Correct  Correct
1. 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:

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
2. 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.
Incorrect. Refer to Section 2.

3. 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

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.

```sql
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.

5. Single row subqueries may NOT include which of these operators? Mark for Review

(1) Points

ALL (*)

= 

<>

> 

Incorrect. Refer to Section 2.

6. 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
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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;

Incorrect Incorrect. Refer to Section 2.
7. Group functions cannot be used in subqueries because they contain too many rows. True or False? Mark for Review
(1) Points

True

False (*)

Correct 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
PLSQL feedback of midterm exam semester 1 part1

v_family_name = SMITH;

V_FAMILY_NAME = SMITH;

v_family_name := SMITH;

v_family_name := 'SMITH'; (*)

Incorrect Incorrect. Refer to Section 2.

2. 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 Correct

3. 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
5. 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.

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

True (*)

False

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 (*)

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

(Choose all correct answers)

Concatenation (*)

Exception
9. 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 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?
DECLARE
  v_char VARCHAR2(8) := '24/09/07';
  v_date DATE;

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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;

Correct 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 Incorrect. Refer to Section 2.
Using implicit conversions is good programming practice. Mark for Review (1) Points

True

False (*)

Correct 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

Page 167
Correct
2. 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;
(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.
3. Which of the following data type conversions can be done implicitly? (Choose two.)
(1) Points

(Choose all correct answers)

DATE to NUMBER
NUMBER to VARCHAR2 (*)
NUMBER to PLS_INTEGER (*)

Incorrect Incorrect. Refer to Section 2.
4. Using implicit conversions is good programming practice. 
(1) Points

True
False (*)
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Correct  Correct
5. 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  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  Incorrect. Refer to Section 2.
7. Which explicit function is used to convert a character into a number?  Mark for Review
(1) Points

TO_DATE

TO_NUMBER (*)

TO_CHAR

Correct  Correct
8. 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
PLSQL feedback of midterm exam semester 1 part1

v_date := FROM_CHAR(v_char,'dd/mm/yy');

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 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

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
(1) Points

v_family_name = SMITH;

V_FAMILY_NAME = SMITH;

v_family_name := SMITH;

v_family_name := 'SMITH'; (*)

Incorrect Incorrect. Refer to Section 2.

14. The DECODE and MAX functions can be used in PL/SQL statements. True or False?  Mark for Review
(1) Points

True

False (*)

Correct Correct

15. 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.

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);
PLSQL feedback of midterm exam semester 1 part 1

```plsql
v_mynum := 3;
END;
DBMS_OUTPUT.PUT_LINE(v_mynum);
END;
```

1. Points

3,3

3,7

Null, 7 (*)

Null, 3

Incorrect Incorrect. Refer to Section 2.

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.

Incorrect Incorrect. Refer to Section 2.

3. 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?

```plsql
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:

```plsql
v_myvar := 25;
```
PLSQL feedback of midterm exam semester 1 part 1

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_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.

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.

Correct Correct

5. What is wrong with this code?

```
DECLARE
  v_a NUMBER;
BEGIN
  v_a := 27;
  <<inner_block>>
  BEGIN
    v_a := 15;
  END;
END;
```

Mark for Review

(1) Points

The outer block has no label.
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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

6. 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

Incorrect. Refer to Section 2.

7. 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;
END;
EXCEPTION
  WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(var_1);
END; Mark for Review
(1) Points

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8. Examine the following code. Line A causes an exception. What will be displayed when the block is executed?

```sql
DECLARE
  x NUMBER := 10;
  y NUMBER;
BEGIN
  x := 15;
  y := 'Happy'; -- Line A
  x := 20;
EXCEPTION
  WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(x);
END;
```

Mark for Review
(1) Points

10

20

15 (*)

Nothing is displayed

Incorrect Incorrect. Refer to Section 2.

1. What is wrong with the following statement?

```sql
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. (*)
1. To modify an existing row in a table, you can use the _______ statement.  
   Mark for Review  
   (1) Points
   MODIFY
   INSERT
   ALTER
   UPDATE (*)

2. 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.

3. 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
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a subquery).

A WHERE clause. (*)

5. 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.

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 EMPLOYEE_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 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 (*)

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Incorrect Incorrect. Refer to Section 3.
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 (*)

Correct 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.

Incorrect Incorrect. Refer to Section 3.
When used in a PL/SQL block, which SQL statement must return exactly one row?

(1) Points

- INSERT
- UPDATE
- SELECT (*)
- MERGE
- DELETE

Correct

5. Which SQL statements can be used directly in a PL/SQL block? (Choose two.)

(1) Points

(Choose all correct answers)

- GRANT EXECUTE ON ...
- SELECT * INTO ... (*)
- REVOKE SELECT ON ...
- UPDATE employees SET... (*)
- ALTER TABLE employees ...

Incorrect

6. Does PL/SQL allow you to have a variable with the same name as a database column?

(1) Points

No

Yes (*)

Correct
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(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;

Incorrect Incorrect. Refer to Section 3.

1. 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.

Correct 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
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(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 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. (*)

COMMIT and ROLLBACK statements only.

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

   INSERT and UPDATE only.
   UPDATE and DELETE only.
   INSERT, UPDATE and DELETE only.
   INSERT, UPDATE, DELETE and MERGE. (*)

Correct Correct

1. 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.

Incorrect Incorrect. Refer to Section 3.

2. 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='Deutschland'
       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 (*)

Incorrect Incorrect. Refer to Section 3.

3. 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

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.
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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? 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. (*)

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

4. (1) Points

IF condition THEN DO statement1; statement2; END IF;

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

IF condition THEN statement1; statement2; END IF;

IF condition THEN statement1; AND statement2; END IF;

Incorrect Incorrect. Refer to Section 4.

5. 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 Incorrect. Refer to Section 4.

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 Incorrect. Refer to Section 4.

7. 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';
END IF;
DBMS_OUTPUT.PUT_LINE(mature);

What will be displayed when this code is executed?
Mark for Review
(1) Points

child

teenager

adult (*)

adult teenager child

Incorrect Incorrect. Refer to Section 4.

8. 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...ELIF...ELSE

CASE...WHEN...THEN

A loop. (*)

Correct Correct

1. Examine the following code:

DECLARE
v_a BOOLEAN;
v_b BOOLEAN := FALSE;
v_c BOOLEAN ;
BEGIN
v_c := (v_a AND v_b);
-- Line A
....;
END;

What is the value of v_c at Line A?
PLSQL feedback of midterm exam semester 1 part 1

Mark for Review

(1) Points

True

False (*)

NULL

Undefined

Incorrect Incorrect. Refer to Section 4.

2. Look at the following code:

```sql
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 Incorrect. Refer to Section 4.

3. What will be displayed when the following block is executed?

```sql
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;
```

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END;

Mark for Review

(1) Points

Equal

Undefined (*)

Unequal

Nothing will be displayed because V_MESSAGE is set to NULL.

Incorrect Incorrect. Refer to Section 4.

4. 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';

Incorrect Incorrect. Refer to Section 4.

5. 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 -> C and so on.
PLSQL feedback on midterm exam semester 1 part1

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';

Incorrect Incorrect. Refer to Section 4.

6. How must you end a CASE statement?

Mark for Review

(1) Points

END;

END CASE; (*)

END IF;

ENDCASE;

Incorrect Incorrect. Refer to Section 4.

7. 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.

Incorrect Incorrect. Refer to Section 4.

8. How must you end a CASE expression? Mark for Review (1) Points

END; (*)

ENDIF;

END CASE;

ENDCASE;

Incorrect Incorrect. Refer to Section 4.

1. 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 Incorrect. Refer to Section 4.

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

Updating the salary of one employee.
PLSQL feedback of midterm exam semester 1 part1

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.

Incorrect Incorrect. Refer to Section 4.

3. 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.

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 Correct

5. Look at this code:

DECLARE
v_bool BOOLEAN := TRUE;
v_date DATE;
BEGIN
LOOP
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 Incorrect. Refer to Section 4.

6. Examine the following code:

```
DECLARE
  v_count NUMBER := 0;
  v_string VARCHAR2(20);
BEGIN
  LOOP
    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

xxxxxxxxxxxxxxx

Incorrect Incorrect. Refer to Section 4.

7. What will be displayed when this block is executed?

```
DECLARE
  v_count NUMBER := 10;
  v_result NUMBER;
BEGIN
  LOOP
    v_count := v_count - 1;
    EXIT WHEN v_count < 5;
    v_result := v_count * 2;
  END LOOP;
END;
```
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END LOOP;
DBMS_OUTPUT.PUT_LINE(v_result);
END;

Mark for Review
(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

A loop (*)

A CASE statement

IF ... END IF;

A Boolean variable.

Incorrect Incorrect. Refer to Section 4.
1. 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

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

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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. (*)

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.

5. 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

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PLSQL feedback of midterm exam semester 1 part1
FOR i IN REVERSE 1 .. 10 LOOP (*)

FOR i IN REVERSE 10 .. 1 LOOP

Incorrect Incorrect. Refer to Section 4.
6. 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 Incorrect. Refer to Section 4.
7. 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
8. 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 (*)

Correct Correct
1. 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 (*)

Both loops can have the same label

Correct Correct
2. 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
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Correct  Correct

3. What will be displayed when the following block is executed?:

DECLARE
x 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;

(1) Points

5

10

15

50 (*)

Incorrect  Incorrect. Refer to Section 4.

4. 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
  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?

(1) Points

EXIT;

EXIT red;

EXIT <<blue>>;
PLSQL feedback of midterm exam semester 1 part1
EXIT blue; (*)

Incorrect Incorrect. Refer to Section 4.
1. 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.
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
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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.

Incorrect Incorrect. Refer to Section 5.

4. 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 (*)

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5. What is wrong with the following code?

```plsql
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;
        EXIT WHEN dept_curs%NOTFOUND;
        DBMS_OUTPUT.PUT_LINE(v_dept_name);
    END LOOP;
    CLOSE dept_curs;
END;
```

Incorrect Incorrect. Refer to Section 5.

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

6. 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.
7. 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.

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. (*)
PLSQL feedback of midterm exam semester 1 part 1
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

Incorrect Incorrect. Refer to Section 5.
11. 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

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.
2. 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
WHERE LOWER(region_name) LIKE '%asia%');
```

Incorrect Incorrect. Refer to Section 5.
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;
LOOP
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);
```
PL/SQL feedback of midterm exam semester 1 part1

```plsql
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);

(*)
```

Incorrect Incorrect. Refer to Section 5.

2. How must you reference one field which is part of a PL/SQL record? 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 Incorrect. Refer to Section 5.

3. 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;

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Incorrect Incorrect. Refer to Section 5.

4. 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

Correct Correct

5. 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 Incorrect. Refer to Section 5.

6. Which of the following explicit cursor attributes evaluates to TRUE if the most recent FETCH returns a row?
Mark for Review
(1) Points

%ISOPEN
Incorrect Incorrect. Refer to Section 5.
7. You can reference explicit cursor attributes directly in a SQL statement. True or False? Mark for Review (1) Points

True

False (*)

Incorrect Incorrect. Refer to Section 5.
1. 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.

Incorrect Incorrect. Refer to Section 5
2. 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 ...

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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);
END LOOP;
IF emp_record.last_name = 'Patel' THEN ...
(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.

Which of the following is a benefit of using a cursor FOR loop?

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.

Which one of the following is a valid cursor FOR loop with a subquery?

Incorrect. Refer to Section 5
Incorrect. Refer to Section 5
PL/SQL feedback of midterm exam semester 1 part 1

FOREMREC IN (SELECTlast_name || first_name FROM employees) LOOP ... 

FOREMREC IN (SELECTUPPER(last_name) FROM employees) LOOP ...

FOREMREC IN SELECT last_name, salary*12 "ANNSAL" FROM employees LOOP ...

FOREMREC IN (SELECT last_name, salary*12 "ANNSAL" FROM employees) LOOP ... (*)

None of the above.

Incorrect Incorrect. Refer to Section 5

6. Look at the following code:

DECLARE
CURSOR emp_cursor IS SELECT * FROM employees;
BEGIN
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 Incorrect. Refer to Section 5

1. 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
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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 ... 

Incorrect Incorrect. Refer to Section 5
2. 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. (*)

Incorrect 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? Mark for Review
(1) Points

True (*)

False
4. 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).

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.

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

(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.

1. 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
PLSQL feedbak of midterm exam semester 1 part 1
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.

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
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FOR UPDATE (*)

FOR UPDATE (employees)

Correct Correct

4. 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

5. Why can we NOT code:
INSERT INTO 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 ... ;
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Incorrect Incorrect. Refer to Section 5.

6. 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.

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)

Incorrect Incorrect. Refer to Section 5.

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

You cannot use cursor FOR loops.
PL/SQL feedback of midterm exam semester 1 part1
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. (*)

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

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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
  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 Incorrect. Refer to Section 5.
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; (*)

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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;

Incorrect Incorrect. Refer to Section 5.

6. 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;
LOOP
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

1. Errors are handled in the Exception part of the PL/SQL block. True or False?

Mark for Review
(1) Points
PLSQL feedback of midterm exam semester 1 part1

True (*)

False

Incorrect Incorrect. Refer to Section 1.

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

(1) Points

Executable

Exception

Declarative (*)

Definition

Incorrect Incorrect. Refer to Section 1.

3. 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 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 (*)
PL/SQL feedback of midterm exam semester 1 part 1

Utilities

Object Browser

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. 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

Incorrect  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 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 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
PL/SQL feedback on midterm exam semester 1 part 1

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

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 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

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declarative

nondeclarative

procedural (*)

low level

Incorrect Incorrect. Refer to Section 1.

Section 2

14. A variable must have a value if NOT NULL is specified. True or False? Mark for Review (1) Points

True (*)

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

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

A table name.

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PLSQL feedback of midterm exam semester 1 part 1
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 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 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;
PLSQL feedback of midterm exam semester 1 part1

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

Incorrect Incorrect. Refer to Section 2.

20. Examine the following code. Line A causes an exception. 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

Incorrect Incorrect. Refer to Section 2.

21. What will be displayed when the following code is executed?

DECLARE
  varA NUMBER := 12;
BEGIN
  DECLARE
    varB NUMBER := 8;
END;
PLSQL feedback of midterm exam semester 1 part1

BEGIN
  varA := varA + varB;
END;

DBMS_OUTPUT.PUT_LINE(varB);
END;

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;
BEGIN
  v_mynumber := 6;
  v_mybool := (v_mynumber BETWEEN 10 AND 20);
PLSQL feedback of midterm exam semester 1 part1
v_mybool := NOT (v_mybool);
END;

Mark for Review
(1) Points

True (*)
False

Incorrect Incorrect. Refer to Section 2.

24. 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 Correct

25. 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. (*)
26. PL/SQL can convert a VARCHAR2 value containing alphabetic characters to a NUMBER value. True or False? Mark for Review
(1) Points

True

False (*)

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

True

False (*)

28. What is wrong with this assignment statement?

myvar := 'To be or not to be';
myvar := '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
29. Single row character functions are valid SQL functions in PL/SQL. True or False? Mark for Review
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 2.

30. 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

Incorrect Incorrect. Refer to Section 2.

31. Valid identifiers begin with a Mark for Review
(1) Points

Number

Letter (*)

Special character

Incorrect Incorrect. Refer to Section 2.

32. Which of the following are valid identifiers? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

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PLSQL feedback of midterm exam semester 1 part1

Full Name

students_street_address (*)

v_code (*)

#hours

completion_

Incorrect Incorrect. Refer to Section 2.

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 Incorrect. Refer to Section 2.

35. A movie is an example of which category of data type? Mark for Review

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(1) Points

Scalar

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 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
PL/SQL feedback of midterm exam semester 1 part 1

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

(Choose all correct answers)

v_last_name := Chandra;

v_blackout_date := '31-DEC-2006'; (*)

v_population := 333444; (*)

v_music_type := 'ROCK'; (*)

Incorrect Incorrect. Refer to Section 2.

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 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

42. The following anonymous block of code is run:

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?
(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 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?
(1) Points

SELECT salary
PLSQL feedback of midterm exam semester 1 part1

```sql
    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 Incorrect. Refer to Section 3.

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

```sql
    SELECT last_name FROM employees
    WHERE employee_id=100;

    DESCRIBE employees;

    UPDATE employees
    SET last_name='Smith';
```

(*) Correct Correct

46. A variable is declared as:

```sql
    DECLARE
        v_holdit employees.last_name%TYPE;
    BEGIN ...
```

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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 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 Incorrect. Refer to Section 3.
PL/SQL feedback of midterm exam semester 1 part 1

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.
PL/SQL feedback of midterm exam semester 1 part 1

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 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 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

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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 Incorrect, Refer to Section 1.

7. Every PL/SQL anonymous block must start with the keyword DECLARE. True or False? Mark for Review (1) Points

- True
- False (*)
Incorrect Incorrect. Refer to Section 1.

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

(1) Points

Executable

Exception

Declarative (*)

Definition

Correct Correct

9. 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 of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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');
PLSQL feedback of midterm exam semester 1 part1

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 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
Section 2

14. 1. Null
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

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

16. Which of the following should NOT be used as the name of a variable?

Mark for Review

(1) Points

A table name.
PLSQL feedback of midterm exam semester 1 part1

A table column name. (*)

The database name.

Correct Correct

17. Delimiters are _____ that have special meaning to the Oracle database. Mark for Review
(1) Points

identifiers

variables

symbols (*)

Correct Correct

18. Which of the following are valid identifiers? (Choose two.)
Mark for Review
(1) Points

(Choose all correct answers)

Full Name

students_street_address (*)

v_code (*)

#hours

completion_%

Correct Correct

19. Which statements about lexical units are true? (Choose two.)
Mark for Review
(1) Points

(Choose all correct answers)
PLSQL feedback of midterm exam semester 1 part1

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;
    END;
    DBMS_OUTPUT.PUT_LINE(varB);
END;

Mark for Review

(1) Points

8

12

Nothing, the block will fail with an error (*)

20

VarB

Correct Correct

21. 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
22. When nested blocks are used, which blocks can or must be labeled?

(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
    DBMS_OUTPUT.PUT_LINE(outer_var);
END;

Mark for Review

(1) Points

My

My name (*)

My name is

My name is Zeynep

Incorrect Incorrect. Refer to Section 2.

24. Examine the following code. At Line A, we want to assign a

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PLSQL feedback of midterm exam semester 1 part1

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;

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? Mark
    for Review
    (1) Points

    True (*)

    False

Incorrect    Incorrect. Refer to Section 2.

26. 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
PLSQL feedback of midterm exam semester 1 part1

Scalar

Composite (*)

LOB

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

(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.

When a variable is defined using the NOT NULL keywords, the variable must contain a value. True or False?
(1) Points

True (*)

False

Correct

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

True (*)

False

Correct

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

True (*)

False
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Correct Correct

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 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 Incorrect. Refer to Section 2.

39. Examine the following code. What is the final value of V_MYBOOL?

   DECLARE
   v_mynumber NUMBER;
   v_mybool BOOLEAN;
   BEGIN
   v_mynumber := 6;
   v_mybool := (v_mynumber BETWEEN 10 AND 20);
   v_mybool := NOT (v_mybool);
   END;

   Mark for Review
40. What is wrong with this assignment statement?

```sql
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

Incorrect Incorrect. Refer to Section 2.

41. Given this first section of code:

```sql
DECLARE
  v_result employees.salary%TYPE;
BEGIN
WHICH statement will always return exactly one value?
```

Mark for Review

(1) Points

```sql
SELECT salary INTO v_result
FROM employees;
```

- SELECT salary INTO v_result
  FROM employees
WHERE last_name = 'Smith';

SELECT salary
PLSQL feedback of midterm exam semester 1 part1

INTO v_result
FROM employees
WHERE department_id = 80;

SELECT SUM(salary)
INTO v_result
FROM employees;

Incorrect Incorrect. Refer to Section 3.

42. Which rows will be deleted from the EMPLOYEES table when the following code is executed?

DECLARE
    salary employees.salary%TYPE := 12000;
BEGIN
    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 Incorrect. Refer to Section 3.

43. 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
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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        Incorrect. Refer to Section 3.

45. 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
PLSQL feedback of midterm exam semester 1 part 1 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  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  Incorrect. Refer to Section 3.
48. A PL/SQL block includes the following statement:

```sql
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.

49. Assume there are 5 employees in Department 10. What happens when the following statement is executed?

```sql
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 Incorrect. Refer to Section 3.

50. Which SQL statement can NOT use an implicit cursor?

Mark for Review

(1) Points

A DELETE statement

An UPDATE statement
PLSQL feedback of midterm exam semester 1 part 1

A SELECT statement that returns multiple rows (*)

A SELECT statement that returns one row

Correct    Correct

1. 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';
  ELSE
    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');
  ELSE
    DBMS_OUTPUT.PUT_LINE('OTHER');
  END IF;
END;

Which word will be displayed?
Mark for Review
(1) Points
PLSQL feedback of midterm exam semester 1 part1

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 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

5. 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) (1 Points)

(Choose all correct answers)

IF ... THEN ... ELSE

A WHILE loop (*)

CASE ... WHEN ... THEN

A FOR loop (*)

A basic loop (*)

Incorrect

Incorrect. Refer to Section 4.

6. What kind of statement is best suited for displaying the multiplication table for "sixes": 6x1=6, 6x2=12 ... 6x12=72? (1 Points)

CASE expression

IF statement

CASE statement

LOOP statement (*)

Incorrect

Incorrect. Refer to Section 4.

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)

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FOR loop

IF-THEN loop

Basic loop (*)

WHILE loop

CASE loop

Correct          Correct

8. 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:

```sql
v_counter := 1;
LOOP
  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. (*)
Correct Correct

10. Which one of these is NOT a kind of loop? Mark for Review
(1) Points

ASCENDING loop (*)

FOR loop

Basic loop

WHILE loop

Incorrect Incorrect. Refer to Section 4.

11. 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;

Mark for Review
(1) Points

High Paid

Low Paid

Null

The code will fail and return an exception (*)

Incorrect Incorrect. Refer to Section 4.

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

...
PLSQL feedback of midterm exam semester 1 part 1

v_result :=
    CASE v_grade
The next line should be
Mark for Review
(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 Incorrect. Refer to Section 4.

13. What will be the value of variable c after the following 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 Incorrect. Refer to Section 4.

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
    IF a AND b THEN c := 2;
    ELSIF a OR b THEN c := 0;
    ELSE c := 1;
    END IF;
END;

1. Mark for Review

(1) Points

1

Null

0 (*)

2

Incorrect Incorrect. Refer to Section 4.

15. What value will v_answer contain after the following code is 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:

```sql
DECLARE
    v_bool BOOLEAN := FALSE;
    v_counter NUMBER(4) := 0;
BEGIN
    ... Line A
END;
```

Which of the following is NOT valid at line A?
(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.

17. In a FOR loop, an implicitly declared counter automatically increases or decreases with each iteration. True or False?
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 4.

18. Which statement best describes when a FOR loop should be used?
(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 Incorrect. Refer to Section 4.

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

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 Incorrect. Refer to Section 4.

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 Incorrect. Refer to Section 4.

21. 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.

Incorrect Incorrect. Refer to Section 4.

It will result in an error because the counter was not explicitly declared.
Incorrect Incorrect. Refer to Section 4.

22. What kinds of loops can be nested? Mark for Review

(1) Points

- BASIC loops
- WHILE loops
- FOR loops
- All of the above (*)

Incorrect Incorrect. Refer to Section 4.

23. When coding two nested loops, both loops must be of the same 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_number = 6. Which statement would you write on Line A?

<<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; (*)
Incorrect Incorrect. Refer to Section 4.

25. 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

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;
BEGIN
  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.

Nothing is wrong. The block will execute successfully and display all departments and the employees in those departments. (*)

Correct

27. When using multiple nested cursors, what kinds of loops can 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 Incorrect. Refer to Section 5.

28. You want to display all locations, and the departments in each location. Examine the following code:

DECLARE
CURSOR loc_curs IS SELECT * FROM locations;
CURSOR dept_curs(p_loc_id NUMBER) IS
SELECT * FROM departments WHERE location_id = p_loc_id;
BEGIN
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

null
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```
LOOP ... END LOOP;

loc_rec.location_id (*)
```

Incorrect Incorrect. Refer to Section 5.

29. Assume that you have declared a cursor called C_EMP. Which of the following statements about C_EMP is correct? (Choose two.) Mark for 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 attribute is true? Mark for Review

(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 Incorrect. Refer to Section 5.

31. The DEPARTMENTS table contains four columns. Examine the following code:

DECLARE
cursor dept_curs IS
  SELECT * FROM departments;
```

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v_dept_rec dept_curs%ROWTYPE;
BEGIN
  OPEN dept_curs;
  FETCH dept_curs INTO v_dept_rec;
...

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 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 ...);
  &nbsp...

To display the fetched last name, what should you code at Point A?
Mark for Review
PL/SQL feedback of midterm exam semester 1 part 1

(1) Points

v_emp_rec.last_name (*)

v_emp_rec(last_name)

v_emp_rec

last_name

None of the above

Incorrect Incorrect. Refer to Section 5.

34. Which of the following cursor attributes evaluates to TRUE if the cursor is open? Mark for Review
(1) Points

%ISOPEN (*)

%NOTFOUND

%FOUND

%ROWCOUNT

Incorrect Incorrect. Refer to Section 5.

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;
  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
PLSQL feedback of midterm exam semester 1 part1

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. (*)

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:

1. OPEN my_curs;
2. CLOSE my_curs;
3. 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
PL/SQL feedback of midterm exam semester 1 part1

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;

(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 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 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.

Incorrect Incorrect. Refer to Section 5.

41. What will happen when the following code is executed?

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DECLARE
CURSOR emp_curs IS
    SELECT salary FROM employees;
v_salary employees.salary%TYPE;
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;
BEGIN
;
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;
PLSQL feedback of midterm exam semester 1 part1
OPEN emp_curs;
FETCH emp_curs;

Incorrect Incorrect. Refer to Section 5.

43. The following code fragment shows a cursor FOR loop:
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 Incorrect. Refer to Section 5

44. What is wrong with the following code?
DECLARE CURSOR dept_curs IS SELECT * FROM departments;
BEGIN
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);
END;
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.
PLSQL feedback of midterm exam semester 1 part1
The cursor DEPT_CURS has not been closed.

Nothing is wrong, this code will execute successfully.

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?
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 has not unlocked the row.

Incorrect 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:

```sql
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 Incorrect. Refer to Section 5.

48. You want to declare a cursor which locks each row fetched by the cursor. Examine the following code:

```sql
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;
```

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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

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 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

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
PL/SQL feedback of midterm exam semester 1 part 1

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. (*)

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
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
PLSQL feedback of midterm exam semester 1 part 1

subroutine

function

anonymous (*)

Incorrect. Refer to Section 1.

8. Which keywords must be included in every PL/SQL block? (Choose two.) Mark for Review (1) Points

(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
What is the purpose of using DBMS_OUTPUT.PUT_LINE in a PL/SQL block?

10. 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?
    (1) Points

    True (*)
    False

Correct

12. In which part of the PL/SQL block are declarations of variables defined?
    (1) Points

    Executable
    Exception
    Declarative (*)
    Definition

Correct

13. Which statements are optional in a PL/SQL block? (Choose two.)
    (1) Points

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(1) Points

(Choose all correct answers)

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.
PLSQL feedback of midterm exam semester 1 part1

16. Which of the following are disadvantages of implicit data type conversions? (Choose two.) Mark for Review

(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:

```sql
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
PLSQL feedback of midterm exam semester 1 part 1

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

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

True

False (*)

Correct

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

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;
24. If you are using the %TYPE attribute, you can avoid hard coding the:

Mark for Review

(1) Points

Data type (*)

Table name

Column name

Constraint

Incorrect. Refer to Section 2.

25. Is the following variable declaration correct or not?

 DECLARE
   display_qty CONSTANT NUMBER;

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

27. 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 (*)
PLSQL feedback of midterm exam semester 1 part1

False

Correct

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

30. Valid identifiers begin with a Mark for Review
(1) Points

Number

Letter (*)

Special character

Correct
PLSQL feedback of midterm exam semester 1 part1

31. 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.

32. 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

Scalar
PLSQL feedback of midterm exam semester 1 part1

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 for Review (1) Points

True (*)

False

Correct

36. 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. (*)
37. 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

38. What will be displayed when the following code is executed?

DECLARE
  x VARCHAR2(6) := 'Chang';
BEGIN
  DECLARE
    x VARCHAR2(12) := 'Susan';
  BEGIN
    x := x || x;
  END;
  DBMS_OUTPUT.PUT_LINE(x);
END;

Mark for Review
(1) Points

Susan

Chang (*)

ChangChang

SusanChang

The code will fail with an error

Incorrect. Refer to Section 2.

39. 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
PLSQL feedback of midterm exam semester 1 part 1

The exception is propagated to the outer block (*)

Oracle automatically tries to re-execute the inner block

The user's database session is automatically disconnected

Incorrect. Refer to Section 2.

40. Examine the following code. Line A causes an exception. What will be displayed when the block is executed?

```plsql
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

41. The following anonymous block of code is run:

```plsql
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
PLSQL feedback of midterm exam semester 1 part1

(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

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. (*)
PLSQL feedback of midterm exam semester 1 part1

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

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;
(*)
PLSQL feedback of midterm exam semester 1 part1

SELECT salary
INTO v_holdit
FROM employees
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
PL/SQL feedback of midterm exam semester 1 part 1

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.
Plsql feedback of midterm exam semester 1 part 1

Incorrect. Refer to Section 3.

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

1. 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 (*)

Correct
2. 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
4. Assignment statements can continue over several lines in PL/SQL. True or False?

   Mark for Review

(1) Points

True (*)
5. Examine the following code. What is the final value of V_MYBOOL?

```
DECLARE
  v_mynumber NUMBER;
  v_mybool  BOOLEAN ;
BEGIN
  v_mynumber := 6;
  v_mybool := (v_mynumber BETWEEN 10 AND 20);
  v_mybool := NOT (v_mybool);
END;
```

Mark for Review

(1) Points

True (*)
PLSQL feedback on midterm exam semester 1 part1

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.

7. What will be displayed when the following code is executed?
DECLARE
  varA NUMBER := 12;
BEGIN
  DECLARE
    varB NUMBER := 8;
  BEGIN
    Page 297
PLSQL feedback of midterm exam semester 1 part1

varA := varA + varB;
END;
DBMS_OUTPUT.PUT_LINE(varB);
END;  Mark for Review

(1) Points

8

12

Nothing, the block will fail with an error (*)

20

VarB

Incorrect. Refer to Section 2.
8. ______ are meant to store large amounts of data. Mark for Review (1) Points

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)
PLSQL feedback of midterm exam semester 1 part1

yesterday (*)

yesterday's date

number_of_students_in_the_class

v$testresult (*)

#students

Incorrect. Refer to Section 2.
PLSQL feedback of midterm exam semester 1 part 1

Section 3

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

True

False (*)

Section 3

11. Which rows will be deleted from the EMPLOYEES table when the following code is executed?
DECLARE
  salary employees.salary%TYPE := 12000;
BEGIN
  DELETE FROM employees
    WHERE salary > salary;
END; Mark for Review
(1) Points

All rows whose SALARY column value is greater than 12000.
PLSQL feedback of midterm exam semester 1 part1

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 not at all (*)
PLSQL feedback of midterm exam semester 1 part1

A single SQL statement that updates multiple rows of a table

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
15. Examine the following block:
DECLARE
    v_counter PLS_INTEGER := 1;
BEGIN
    LOOP
        DBMS_OUTPUT.PUT_LINE(v_counter);
        v_counter := v_counter + 1;
        EXIT WHEN v_counter = 5;
    END LOOP;
END;

What is the last value of V_COUNTER that is displayed? Mark for Review

(1) Points
Section 4

16. Examine the following code:

```sql
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
PLSQL feedback of midterm exam semester 1 part1

EQUAL

Nothing will be displayed

OTHER (*)

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
Incorrect. Refer to Section 4.

Section 5

18. Which of these statements about implicit cursors is NOT true? 
   Mark for Review 
   (1) Points
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. (*)
20. Which of the following cursor attributes evaluates to TRUE if the cursor is open?

Mark for Review

(1) Points

%ISOPEN (*)

%NOTFOUND

%FOUND

%ROWCOUNT

Section 5

21. When using a cursor FOR loop, OPEN, CLOSE and FETCH statements should not be explicitly coded. True or False?  

Mark for Review

(1) Points
PLSQL feedback of midterm exam semester 1 part1

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;

DELETE FROM departments WHERE c%ROWCOUNT = 1;

None of the above.

Incorrect. Refer to Section 5.

23. How many explicit cursors can be declared and used in a single PL/SQL block?
   Mark for Review
   (1) Points

   One or two.

   Only one.
As many as needed. (*)

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:
  ...
  ...

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25. There are no employees in department 99. What message or messages will be displayed when the following code is executed?

```sql
DECLARE
  e_my_excep EXCEPTION;
BEGIN
  UPDATE employees SET salary = 10000
  WHERE department_id = 99;
END;
```

Incorrect. Refer to Section 6.
PLSQL feedback of midterm exam semester 1 part1

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;

(1) Points

Message 1
Message 3

Message 1
Message 2

Message 1
Message 3
Message 4

Message 1
Message 4
(*)

Section 6

26. Which of the following are good practice guidelines for exception handling? (Choose three.)

Mark for Review
PLSQL feedback of midterm exam semester 1 part1

(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.
27. Which of the following are examples of predefined Oracle Server errors? (Choose three.)

(Choose all correct answers)

- TOO_MANY_ROWS (*)
- NO_DATA_FOUND (*)
- OTHERS
- ZERO_DIVIDE (*)
- E_INSERT_EXCEPT
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 => A);

defproc(30, 60 => C);
PLSQL feedback of midterm exam semester 1 part1

defproc(40, 70); (*)

defproc(10 => A, 25 => C);

defproc;

Incorrect. Refer to Section 7.

29. 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 (*)
PLSQL feedback of midterm exam semester 1 part1

A large object datatype such as CLOB

A PLSQL record defined using %ROWTYPE

Incorrect. Refer to Section 7.

30. 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?

A. Retrieve the saved code from "Saved SQL" in SQL Commands
B. Execute the code to create the procedure
C. Execute the code to re-create the procedure
D. Click on the "Save" button and save the procedure code
E. Modify the code in the SQL Commands window
F. Type the procedure code in the SQL Commands window

(1) Points

F, C, A, B, E, D
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? Mark for Review (1) Points

INSERT and UPDATE, but not DELETE.

INSERT only.

All DML statements. (*)

UPDATE only
Incorrect. Refer to Section 8.

33. 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? (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 (*)

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;
END;  Mark for Review
(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.
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
END;
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;

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 (*)
A business rule states that an employee's salary cannot be greater than 99,999.99 or less than 0. The best way to enforce this rule is by using:

1. A datatype of NUMBER(7,2) for the SALARY column
2. A database trigger
3. A check constraint (*)
An application trigger

A view

Incorrect. Refer to Section 10.

45. 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
46. 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

DECLARE
  v_myrec IS RECORD mypack.mytype;
BEGIN ...
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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; (*)
PLSQL feedbak of midterm exam semister 1 part1

GRANT SELECT ON filesdir TO PUBLIC;

GRANT QUERY ON DIRECTORY filesdir TO PUBLIC;

GRANT READ ON 'C:\BFILEDIR' TO PUBLIC;

Incorrect. Refer to Section 11.

49. Which of the following methods can be used to query CLOB data values? (Choose two.)
   Mark for Review
   (1) Points

(Choose all correct answers)
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SELECT (*)

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

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```
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

(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';
```

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

Section 1

1. Which statements are optional in a PL/SQL block? (Choose two.) Mark for Review

(1) Points
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(Choose all correct answers)

DECLARE (*)
BEGIN
EXCEPTION (*)
END;

Correct

2. 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

3. 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

Section 2

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

Incorrect. Refer to Section 2.
5. Delimiters are _____ that have special meaning to the Oracle database. Mark for Review
   (1) Points
   identifiers
   variables
   symbols (*)

   Incorrect. Refer to Section 2.

6. _____ are meant to store large amounts of data. Mark for Review
   (1) Points
   Variables
   Scalar data types
   LOBs (*)

   Correct

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

   Correct

8. 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

9. When nested blocks are used, which blocks can or must be labeled? Mark for Review
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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.
(*)&

Correct

Section 3

10. 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.
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salary employees.salary%TYPE := 12000;
BEGIN
  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.

Correct

12. The following anonymous block of code is run:
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

Section 4

13. You want to display multiplication tables for numbers up to 12. The display should look like this:
1 x 1 = 1
1 x 2 = 2
.....
1 x 12 = 12
2 x 1 = 2
2 x 2 = 4
.....
2 x 12 = 24
3 x 1 = 3
12 \times 12 = 144

Which of the following is an efficient way to do this in PL/SQL? Mark for Review
(1) Points

- Use two nested FOR loops. (*)
- Store all the numbers from 1 to 144 in a table, then fetch and display them using a cursor.
- Create a function which accepts two numbers as IN parameters and returns their product. Invoke the function 144 times.
- Write an anonymous block which contains 144 calls to DBMS_OUTPUT, each looking like: DBMS_OUTPUT.PUT_LINE('7 \times 9 = 63');

Correct

14. Which one of these is NOT a kind of loop? Mark for Review
(1) Points

- ASCENDING loop (*)
- FOR loop
- Basic loop
- WHILE loop

Correct

15. 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?
Mark for Review
(1) Points

- WHILE NOT v_bool LOOP
- WHILE v_bool AND v_counter < 6 LOOP
- WHILE v_counter > 8 LOOP
- WHILE v_counter IN 1..5 LOOP (*)

Correct

16. Which of the following is NOT a characteristic of a CASE statement? Mark for Review
(1) Points
It ends with END CASE;

It can be a complete PL/SQL block

It returns a value (*)

It evaluates a condition and performs an action

Incorrect. Refer to Section 4.

17. 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';
  ELSE
    v_result := 'LOW';
  END IF;
END;

What is the final value of v_result?
Mark for Review
(1) Points
  HIGH
  LOW (*)
  MIDDLE
  Null

  Correct

Section 5

18. The employees table contains 11 columns. The following block declares a
cursor and a record based on the cursor:
DECLARE
  CURSOR emp_curs IS
    SELECT * FROM employees;
  v_emp_rec emp_curs%ROWTYPE;

A twelfth column is now added to the employees table. Which of the following
statements is true?
Mark for Review
(1) Points
  The declaration of emp_rec must be changed to add an extra field.
  The block will still work correctly without any changes to the PL/SQL code. (*)
  The block will fail and an INVALID_CURSOR exception will be raised.

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An extra scalar variable must be declared to correspond to the twelfth table column.

Correct

19. 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

20. Examine the following code:
DECLARE
CURSOR c IS SELECT * FROM employees FOR UPDATE;
c_rec c%ROWTYPE;
BEGIN
OPEN c;
FOR i IN 1..20 LOOP
  FETCH c INTO c_rec;
  IF i = 6 THEN
    UPDATE employees SET first_name = 'Joe'
    WHERE CURRENT OF c;
  END IF;
END LOOP;
CLOSE c;
END;

Which employee row or rows will be updated when this block is executed? Mark for Review
(1) Points

The first 6 fetched rows will be updated.
No rows will be updated because you locked the rows when the cursor was opened.
The 6th fetched row will be updated. (*)
The block will not compile because the cursor should have been declared .... FOR UPDATE WAIT 5;
None of the above.
Test: PLSQL Institute Exit Exam

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

Section 5

21. Examine the following declaration of a cursor with a parameter. What should be coded at Point A? DECLARE CURSOR emp_curs(-- Point A --) IS SELECT * FROM employees WHERE job_id = p_job_id;
Mark for Review (1) Points
p_job_id
ST_CLERK'
p_job_id VARCHAR2(25)
p_job_id VARCHAR2 (*)
job_id VARCHAR2

Correct

22. Which of these constructs can be used to fetch multiple rows from a cursor's active set? Mark for Review (1) Points
A CASE statement
An IF .... ELSE statement
A basic loop which includes FETCH and EXIT WHEN statements (*)
A basic loop which includes OPEN, FETCH and CLOSE statements

Correct

23. You want to display each row from the DEPARTMENTS table, and immediately underneath it, a list of all EMPLOYEES in that department. Which of the following is a good way to do this? Mark for Review
(1) Points

Use a single cursor, declared as `SELECT * FROM employees GROUP BY department_id;`

Use two cursors, one for each of the two tables. Declare the `EMPLOYEES` cursor with a parameter for the `DEPARTMENT_ID`. (*

Write a `SELECT` statement which JOINS the two tables, and use `CONNECT BY PRIOR` and `LEVEL` to display the rows in the correct order.

Use a single cursor with a cursor `FOR` loop.

Change the physical model so that all employee and department data is in a single table.

Correct

Section 6

24. 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 (*)

Correct

25. Examine the following code. What message or messages will be displayed when this code is executed?

```sql
DECLARE
    v_last_name employees.last_name%TYPE;
    v_number NUMBER := 27;
BEGIN
    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');
    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
26. 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. (*)

Correct

27. 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

Section 7

28. Which parameter mode is the default? Mark for Review (1) Points

IN (*)

OUT
29. A PL/SQL stored procedure can accept one or more input parameters and can return one or more output values to the calling environment. True or False?  Mark for Review
(1) Points
True (*)
False
Incorrect. Refer to Section 7.

30. A procedure will execute faster if it has at least one parameter.  Mark for Review
(1) Points
True
False (*)
Incorrect. Refer to Section 7.

31. 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.
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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.

32. 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

33. User BOB creates procedure MYPROC using the default Definer's Rights. BOB then executes:
GRANT EXECUTE ON bob.myproc TO ted;
When TED invokes BOB.MYPROC, whose privileges are checked? Mark for Review
(1) Points

TED's privileges
PUBLIC's privileges
SYSTEM's privileges
BOB's privileges (*)
ORACLE's privileges

Incorrect. Refer to Section 8.

34. 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.
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In the column list (SELECT) clause.

In an ORDER BY clause.

Incorrect. Refer to Section 8.

Section 9

35. When a user session changes the value of a package variable, the new value can immediately be seen by other sessions. True or False? Mark for Review
(1) Points

True
False (*)

Correct

36. Which one of the following can NOT be part of a Package? Mark for Review
(1) Points

Procedures
Explicit cursors
Triggers (*)
Functions
Global variables

Correct

37. A SQL statement can pass through several stages. Which of the following is NOT one of these stages? Mark for Review
(1) Points

BIND
FETCH
PARSE
RETURN (*)
EXECUTE

Incorrect. Refer to Section 9.

38. We never need to use a forward declaration when invoking a public subprogram. True or False? Mark for Review
(1) Points
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True (*)
False
Correct

39. 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 (*)
Because DBMS_OUTPUT can raise a NO_DATA_FOUND exception if used inside a packaged procedure

Correct

40. We need to declare a package variable named MYVAR, which can be referenced by any subprogram in the package but can NOT be referenced from outside the package. In the following code, where should MYVAR be declared?
CREATE OR REPLACE PACKAGE varpack IS
    -- Point A
    ...
END varpack;
CREATE OR REPLACE PACKAGE BODY varpack IS
    -- Point B
    PROCEDURE varproc IS
        -- Point C
        BEGIN
            ...
        END varproc;
    PROCEDURE ...
    ...
    -- Point D
END varpack;

Mark for Review
(1) Points
Point A
Point B (*)
Point C
Point D
Point B or Point C, they will both work

Correct
Test: PLSQL Institute Exit Exam

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

Section 10

41. What is wrong with the following code?
CREATE TRIGGER dept_trigg
BEFORE UPDATE OF department_name ON departments
BEGIN
    DBMS_OUTPUT.PUT_LINE(:NEW.department_name);
END;

Mark for Review
(1) Points

You cannot use :NEW in a BEFORE trigger, only in an AFTER trigger.
You cannot use :NEW or :OLD in a statement trigger. (*)
You cannot use DBMS_OUTPUT.PUT_LINE inside a trigger.
The second line should be:
BEFORE UPDATE ON departments.department_name

Incorrect. Refer to Section 10.

42. The database administrator wants to write a log record every time an Oracle Server error occurs in any user's session. The DBA creates the following trigger:
CREATE TRIGGER log_errs_trigg
-- Line A
BEGIN
    INSERT INTO errlog_table VALUES (...);
END;

What should the DBA code at Line A?
Mark for Review
(1) Points

AFTER ERROR ON DATABASE
AFTER SERVER ERROR ON DATABASE
AFTER SERVERERROR ON SCHEMA
AFTER SERVERERROR ON DATABASE (*)
AFTER ORACLE ERROR ON SCHEMA
43. After the following SQL statement is executed, all the triggers on the DEPARTMENTS table will no longer fire, but will remain in the database. True or False?
ALTER TABLE departments DISABLE ALL TRIGGERS;
Mark for Review
(1) Points
True (*)
False
Correct

44. A business rule states that an employee's salary cannot be greater than 99,999.99 or less than 0. The best way to enforce this rule is by using:  Mark for Review
(1) Points
A datatype of NUMBER(7,2) for the SALARY column
A database trigger
A check constraint (*)
An application trigger
A view
Correct

45. 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

46. Which of the following best describes the difference between BLOB and BFILE data? Mark for Review
(1) Points

A BLOB can contain text data while a BFILE cannot.

BLOB data is stored inside the database, while BFILE data is outside the database in separate operating system files. (*)

The maximum size of a BLOB is 2GB; a BFILE can be up to 128TB if needed.

A table can contain several BLOB columns but only one BFILE column.

There is no difference between a BLOB and a BFILE.

Correct

47. The BIGEMP table contains a RESUME column of datatype BFILE, which has been populated with locator values. The following code reads a BFILE locator value into a variable, then checks whether the BFILE itself exists in the operating system directory. If the file is present, the code opens the file and reads its contents. What should be coded at Point A?

DECLARE
    v_locator BFILE;
BEGIN
    SELECT resume INTO v_locator FROM bigemp
    WHERE employee_id = 100;
    -- Point A
    DBMS_LOB.FILEOPEN(v_locator);
    DBMS_LOB.READ(v_locator, ....); ....
    DBMS_LOB.FILECLOSE(v_locator);
END IF;
END;

Mark for Review
(1) Points

IF BFILENAME(v_locator) EXISTS THEN
IF DBMS_LOB.FILEEXISTS(v_locator) = 1 THEN (*)
IF DBMS_LOB.FILEEXISTS(v_locator) THEN
IF DBMS_LOB.FILEEXISTS THEN
IF BFILEEXISTS(v_locator) THEN

Correct

48. An INDEX BY table of records can store a maximum of 255 records. True or False

Correct
True
False (*)

Correct

49. Which of the following will declare a composite PL/SQL data type named COMPO_TYPE, containing two fields named FIELD1 and FIELD2? Mark for Review

(1) Points

DECLARE
    compo_type
    (field1 NUMBER,
     field2 VARCHAR2(30));

DECLARE
    TYPE compo_type IS
    (field1 NUMBER,
     field2 VARCHAR2(30));

DECLARE
    TYPE compo_type IS RECORD
    (field1 NUMBER,
     field2 VARCHAR2(30));

(*)

DECLARE
    compo_type IS RECORD
    (field1 NUMBER,
     field2 VARCHAR2(30));

Correct

Section 12

50. Which of the following will display the number of invalid package bodies in your schema? Mark for Review

(1) Points

SELECT COUNT(*) FROM user_objects
WHERE object_type = 'PACKAGE BODY'
AND status = 'INVALID';

(*)

SELECT COUNT(*) FROM user_dependencies
WHERE type = 'PACKAGE BODY'
AND status = 'INVALID';

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SELECT COUNT(*) FROM user_packages
WHERE status = 'INVALID';

SELECT COUNT(*) FROM user_objects
WHERE object_type LIKE 'PACKAGE%'
AND status = 'INVALID';

Incorrect. Refer to Section 12.

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1. 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 (*)

   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. 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

4. Which statements are optional in a PL/SQL block? (Choose two.) Mark for Review

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(1) Points

(Choose all correct answers)

DECLARE (*)
BEGIN
EXCEPTION (*)
END;

Correct

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

(1) Points

Anonymous
Function (*)
Procedure

Correct

6. Which keywords must be included in every PL/SQL block? (Choose two.) Mark for Review

(1) Points

(Choose all correct answers)

DECLARE
END; (*)
EXCEPTION
BEGIN (*)
DBMS_OUTPUT.PUT_LINE

Correct

7. 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 (*)
8. Which lines of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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'); (*)

Correct

9. 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

Correct

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. 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
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False (*)

Correct

12. 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 (*)

Correct

13. 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 (*)

Correct

Section 2

14. Which of these are PL/SQL data types? (Choose three.) Mark for Review (1) Points

(Choose all correct answers)

- Scalar (*)
- Identifier
- Delimiter
- Composite (*)
- LOB (*)
15. A movie is an example of which category of data type? Mark for Review
(1) Points
Scalar
Composite
Reference
LOB (*)
Correct

16. ______ are meant to store large amounts of data. Mark for Review
(1) Points
Variables
Scalar data types
LOBs (*)
Correct

17. 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

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

19. When a variable is defined using the NOT NULL keywords, the variable must
contain a value. True or False? Mark for Review
20. Assignment statements can continue over several lines in PL/SQL. True or False? Mark for Review

True (*)
False
Correct

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

DECLARE
maxsalary NUMBER(7) = 5000;
Mark for Review

Correct.
Not correct. (*)
Correct

22. Reserved words can be used as identifiers. True or False? Mark for Review

True
False (*)
Incorrect. Refer to Section 2.

23. Which of the following are valid identifiers? (Choose two.) Mark for Review

(Choose all correct answers)
yesterday (*)
yesterday's date
number_of_students_in_the_class
v$testresult (*)
#students

Correct
24. Which of the following are valid identifiers? (Choose two.) Mark for Review (1) Points

(Choose all correct answers)

Full Name
students_street_address (*)

v_code (*)

#hours

completion_%

Correct

25. 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

Correct

26. Examine the following code. Line A causes an exception. 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;
END;
Mark for Review (1) Points

12 (*)

24

6

Nothing will be displayed

Correct

27. 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?
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```
<<outer_block>>
DECLARE
  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

28. 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.

Correct

29. What will be displayed when the following code is executed?

```
DECLARE
  varA NUMBER := 12;
BEGIN
  DECLARE
    varB NUMBER := 8;
  BEGIN
    varA := varA + varB;
  END;
  DBMS_OUTPUT.PUT_LINE(varB);
END;
```

Mark for Review

(1) Points

```
8
```

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12
Nothing, the block will fail with an error (*)

20
VarB

Correct

30. Examine the following code. What is the final value of V_MYVAR?
DECLARE
  v_myvar NUMBER;
BEGIN
  v_myvar := 1 + 2 * 3;
  v_myvar := v_myvar * 2;
END;

Mark for Review
(1) Points
81
49
14 (*)
18

Correct

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 Incorrect. Refer to Section 1.

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

True (*)
Incorrect Incorrect. Refer to Section 1.
1. Procedural constructs give you better control of your SQL statements and their execution. True or False?  
(1) Points

True (*)

False

Correct Correct
2. Which of the following can be compiled as a standalone program outside the 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 Incorrect. Refer to Section 1.
3. PL/SQL differs from C and Java in which of the following ways? (Choose two.)  
(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

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

   True (*)

   False

Incorrect

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

   True (*)

   False

Correct

6. 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

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 Incorrect. Refer to Section 1.

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

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

True (*)

False

Incorrect Incorrect. Refer to Section 1.

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

True (*)

False

Correct Correct

5. Which of the following can be compiled as a standalone program outside the database? (1) Points

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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 Incorrect. Refer to Section 1.

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

True (*)

False

Incorrect Incorrect. Refer to Section 1.

1. 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'); (*)

Incorrect Incorrect. Refer to Section 1.

9. What are the characteristics of an anonymous block? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

Unnamed (*)

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Stored in the database

Compiled each time the application is executed (*)

Can be declared as procedures or as functions

Correct Correct

10. 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

3. Which statements are mandatory in a PL/SQL block? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

DECLARE

BEGIN (*)

EXCEPTION

END; (*)

Incorrect Incorrect. Refer to Section 1.

4. 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
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All PL/SQL statements

Incorrect Incorrect. Refer to Section 1.

5. 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 Incorrect. Refer to Section 1.

6. Which of the following is NOT a PL/SQL programming environment?

   Oracle jDeveloper
   SQL*Plus
   gSQL*Plus (*)
   SQL Workshop in Application Express
   Mark for Review
   (1) Points

Correct Correct

7. How can you display results to check that a PL/SQL block is working correctly?

   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

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

(1) Points

Oracle C developer

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 >= 2500 AND salary <= 3500 (*)

WHERE salary <=2500 AND salary >= 3500

WHERE salary BETWEEN 2500 AND 3500 (*)

WHERE BETWEEN salary = 2500 AND salary = 3500

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_number regular code
FROM f_food_items;

Incorrect Incorrect. Refer to Section 1.

3. 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 Incorrect. Refer to Section 1.

4. 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;

Incorrect Incorrect. Refer to Section 1.

5. 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
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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;

Incorrect Incorrect. Refer to Section 1.
6. 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

Incorrect Incorrect. Refer to Section 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;

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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 Incorrect. Refer to Section 1.

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;

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 />

Incorrect Incorrect. Refer to Section 1.

9. Which of the following statements displays 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
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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 Incorrect. Refer to Section 1.
10. 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;

Incorrect Incorrect. Refer to Section 1.
11. Which statement would display the departments in the EMPLOYEES table without displaying any duplicates? Mark for Review (1) Points

SELECT ALL department_id
FROM employees;

SELECT department_id
FROM employees;

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SELECT department_id
FROM employees
having ROWID=1;

SELECT DISTINCT department_id
FROM employees;
(*)

Incorrect Incorrect. Refer to Section 1.

12. 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 Incorrect. Refer to Section 1.

13. What can you use to change the column heading of calculated values in a SQL statement? Mark for Review
(1) Points

Multiplication operator

Column alias (*)

Concatenation operator

The DISTINCT keyword

Incorrect Incorrect. Refer to Section 1

1. 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
2. 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 Incorrect. Refer to Section 1.

3. 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;

   SELECT MONTHS_BETWEEN(SYSDATE,'19-MAR-79') /12 AS YEARS FROM DUAL;

   None of the above

Incorrect Incorrect. Refer to Section 1.

4. Assume that today is December 31, 2007. What would be the output of the following statement?

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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 Incorrect. Refer to Section 1.
5. The following SQL statement will display the value: 456. True or False?

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"
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 Incorrect. Refer to Section 1.
7. Which of the following is not a number function? Mark for Review
   (1) Points
   
   TO_DATE (*)
   
   ROUND
   
   MOD
   
   TRUNC

Incorrect Incorrect. Refer to Section 1.
8. 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

Incorrect Incorrect. Refer to Section 1.
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
   (1) Points
   
   SELECT UPPER(country_name)
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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 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

Today is Thursday!

Today is Thursday! (*)

today is thursday!

Today is Thursday!

Incorrect Incorrect. Refer to Section 1.

12. Which function compares two expressions? Mark for Review
(1) Points

NVL

NULLIF (*)

NVL2

NULL

Incorrect Incorrect. Refer to Section 1.

1. After they are declared, variables can be used only once in an application.
True or False? Mark for Review
(1) Points

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2. 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'); (*)

Incorrect Incorrect. Refer to Section 2.

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

DECLARE
    name, dept VARCHAR2(14);
Mark for Review
(1) Points

legal

illegal (*)

Correct Correct

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

DECLARE
    test NUMBER(5);
Mark for Review
(1) Points

legal (*)

illegal
5. Which of the following are required when declaring a variable? (Choose two.)
   (Choose all correct answers)
   
   - Identifier name (*)
   - CONSTANT
   - Data type (*)
   - NOT NULL

6. Constants must be initialized. True or False?
   
   - True (*)
   - False

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?
   
   - v_result := v_number * 5;
   - v_result := 100 / 2;
   - v_result := ROUND(49.77);
   - All of the above. (*)

Incorrect. Refer to Section 2.

1. Which of the following symbols can be used to enclose a comment in PL/SQL?
   
   Incorrect. Refer to Section 2.
Incorrect 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 Correct

3. 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

4. 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 (*)
5. 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

Incorrect Incorrect. Refer to Section 2.

6. What characters must enclose non-numeric literal values?  Mark for Review
(1) Points

- Double quotes: " " (*)
- Parentheses: ()
- Single quotes: ' ' (*)

Incorrect Incorrect. Refer to Section 2.

1. A 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

Incorrect Incorrect. Refer to Section 2.

2. A Scalar data type holds a ____ value.  Mark for Review
(1) Points

- Multi
- Large
- Single (*)
Incorrect. Refer to Section 2.

3. What are the data types of the variables in the following declaration?

DECLARE 
fname VARCHAR2(20);
fname VARCHAR2(15) DEFAULT 'fernandez';
BEGIN
...

Mark for Review
(1) Points

Scalar (*)

Composite

LOB

Correct

4. Which of the following is a composite data type?

Mark for Review
(1) Points

CLOB

VARCHAR2

RECORD (*)

DATE

Correct

5. 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 Incorrect. Refer to Section 2.
5. 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 Incorrect. Refer to Section 2.
6. 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 (*)

Incorrect Incorrect. Refer to Section 2.
1. If you use the %TYPE attribute, you can avoid hard-coding the column name. True or False? Mark for Review (1) Points

True

False (*)
2. Which of the following is NOT a character data type? Mark for Review
   (1) Points
   
   VARCHAR2
   
   BOOLEAN (*)
   
   CHAR
   
   LONG

3. 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 (*)

4. 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 (*)
   
   Use NOT NULL when the variable must have a value

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

Correct
Correct
1. 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
Incorrect. Refer to Section 2.
2. A nonequijoin combines tables that have one or more exact matching columns. True or False? Mark for Review
(1) Points

True

False (*)

Incorrect
Incorrect. Refer to Section 2.
3. 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

Correct

4. Table aliases can be used to shorten the syntax in join statements. True or False? Mark for Review
(1) Points

True (*)

False

Incorrect

Incorrect. Refer to Section 2.

5. 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

6. 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.
7. What does the following statement return?

```sql
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;
```

(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

8. 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

1. The following EMPLOYEE_ID, SALARY, and COMMISSION_PCT data in the EMPLOYEES table for six employees.

<table>
<thead>
<tr>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>143, 2600, null</td>
</tr>
<tr>
<td>144, 2500, null</td>
</tr>
<tr>
<td>149, 10500, .2</td>
</tr>
<tr>
<td>174, 11000, .3</td>
</tr>
<tr>
<td>176, 8600, .2</td>
</tr>
<tr>
<td>178, 7000, .15</td>
</tr>
</tbody>
</table>

What is the result of the following statement:

```sql
SELECT AVG(commission_pct)
FROM employees
WHERE employee_id IN( 143,144,149,174,176,178)
```

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

Correct Correct

2. 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');

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.

Incorrect Incorrect. Refer to Section 2.

3. 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

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 ?????

(1) Points
region_id, COUNT(country_id)

region_id, country_id

country_id

region_id (*)

Incorrect Incorrect. Refer to Section 2.

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

ALL (*)

=

<>

>

Incorrect Incorrect. Refer to Section 2.

6. 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;

SELECT employee_id, DISTINCT(last_name)
FROM EMPLOYEES
GROUP BY last_name;
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Incorrect Incorrect. Refer to Section 2.
7. Group functions cannot be used in subqueries because they contain too many rows. True or False? Mark for Review
(1) Points

True

False (*)

Correct 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;

V_FAMILY_NAME = SMITH; (*)
v_family_name := SMITH;
v_family_name := 'SMITH'; (*)

Incorrect Incorrect. Refer to Section 2.
2. When PL/SQL converts data automatically from one data type to another, it is called __________ conversion. Mark for Review
(1) Points

Explicit

Implicit (*)

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3. The DECODE and MAX functions can be used in PL/SQL statements. True or False? Mark for Review
   (1) Points
   True
   False (*)

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 Incorrect. Refer to Section 2.

5. 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 (*)
PLSQL feedback of midterm exam semester 1 part 1

False

Incorrect  Incorrect. Refer to Section 2.

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

(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

(Choose all correct answers)

Concatenation (*)

Exception

Exponential (*)

Arithmetic (*)

Incorrect  Incorrect. Refer to Section 2.

9. 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;

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
PL/SQL feedback of midterm exam semester 1 part 1
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?
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;

Correct 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 (*)
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Incorrect Incorrect. Refer to Section 2.
Using implicit conversions is good programming practice. Mark for Review
(1) Points

True

False (*)

Correct 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

25 (*)

14

Correct Correct
2. 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.

Page 396
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.

3. 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.

4. Using implicit conversions is good programming practice. Mark for Review

(1) Points

True

False (*)

Correct Correct

5. 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 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 Incorrect. Refer to Section 2.

7. Which explicit function is used to convert a character into a number?  
Mark for Review
(1) Points

TO_DATE

TO_NUMBER (*)

TO_CHAR

Correct Correct

8. 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;

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 (*)

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

True (*)

False

Correct Correct

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

True

False (*)

Correct Correct

13. 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'; (*)

Incorrect Incorrect. Refer to Section 2.

14. The DECODE and MAX functions can be used in PL/SQL statements. True or False? Mark for Review (1) Points
15. 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.

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;
  END;
  DBMS_OUTPUT.PUT_LINE(v_mynum);
END;
```  

Mark for Review

(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.

Incorrect Incorrect. Refer to Section 2.

3. 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;
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_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.

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
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.

5. What is wrong with this code?

```plsql
DECLARE
  v_a NUMBER;
BEGIN
  v_a := 27;
  <<inner_block>>
  BEGIN
    v_a := 15;
  END;
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.

6. Examine the following code. What is the scope of variable v_myvar?

```plsql
DECLARE
  v_myvar NUMBER;
BEGIN
  v_myvar := 6;
  DECLARE
    v_hervar NUMBER;
    BEGIN
      v_hervar := 4;
    END;
  END;
END;
```

Mark for Review
(1) Points

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Only the outer block

Both the inner and the outer block (*)

Only the inner block

Neither block

Incorrect Incorrect. Refer to Section 2.

7. 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

12

8

4 (*)

Incorrect Incorrect. Refer to Section 2.

8. Examine the following code. Line A causes an exception. What will be displayed when the block is executed?

```
DECLARE
  x NUMBER := 10;
  y NUMBER;
BEGIN
  x := 15;
  y := 'Happy'; -- Line A
  x := 20;
EXCEPTION
  WHEN OTHERS THEN
    DBMS_OUTPUT.PUT_LINE(x);
END;
```
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END;

Mark for Review

(1) Points

10

20

15 (*)

Nothing is displayed

Incorrect Incorrect. Refer to Section 2.
1. 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. (*)

Incorrect Incorrect. Refer to Section 3.
2. To modify an existing row in a table, you can use the ______ statement.
Mark for Review
(1) Points

MODIFY

INSERT

ALTER

UPDATE (*)

Incorrect Incorrect. Refer to Section 3.
3. 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

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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 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 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 EMPLOYEE_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 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 (*)

Incorrect Incorrect. Refer to Section 3.

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 (*)

Correct 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.

Incorrect Incorrect. Refer to Section 3.
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

Correct Correct
5. Which SQL statements can be used directly in a PL/SQL block? (Choose two.) Mark for Review
(1) Points
PLSQL feedback on midterm exam semester 1 part1
(Choose all correct answers)

GRANT EXECUTE ON ...

SELECT * INTO ... (*)

REVOKE SELECT ON ...

UPDATE employees SET...

ALTER TABLE employees ...

Incorrect Incorrect. Refer to Section 3.
6. 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...;
PLSQL feedback of midterm exam semester 1 part1

INSERT INTO...; (*)

SELECT * FROM DUAL;

SHOW USER;

Incorrect Incorrect. Refer to Section 3.
1. 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.

Correct 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
PLSCL feedback of midterm exam semester 1 part1

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 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. (*)

COMMIT and ROLLBACK statements only.

Correct Correct

6. 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
1. 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 Incorrect. Refer to Section 3.
2. 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 (*)
   
Incorrect Incorrect. Refer to Section 3.
3. 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');
   
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Which row(s) will be in the ANIMALS table after this block is executed?  

(1) Points  

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?  

(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?  

(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  

[Insert code here]  

END IF;  

END;
PLSQL feedback of midterm exam semester 1 part1

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 (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

Correct Correct

4. 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;

Incorrect Incorrect. Refer to Section 4.

5. 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;
PLSQL feedback of midterm exam semester 1 part1

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 Incorrect. Refer to Section 4.

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 Incorrect. Refer to Section 4.

7. 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';
END IF;
DBMS_OUTPUT.PUT_LINE(mature);

What will be displayed when this code is executed?

Mark for Review

(1) Points

child

tenager

adult (*)

adultteenagerchild
8. 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

A loop. (*)

Correct

Examine the following code:

```sql
DECLARE
v_a BOOLEAN;
v_b BOOLEAN := FALSE;
v_c BOOLEAN ;
BEGIN
  v_c := (v_a AND v_b);
  -- Line A
  ....
END;
```

What is the value of V_C at Line A?

Mark for Review

(1) Points

Incorrect. Refer to Section 4.

False (*)

COMPLETE
PLSQL feedback of midterm exam semester 1 part1

-- 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 Incorrect. Refer to Section 4.

3. 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 Incorrect. Refer to Section 4.

4. Examine the following code:

DECLARE
  v_score NUMBER(3);
  v_grade CHAR(1);
BEGIN

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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 Incorrect. Refer to Section 4.

5. 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 -> 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';

Incorrect Incorrect. Refer to Section 4.

6. How must you end a CASE statement?

Mark for Review
(1) Points

END;
PLSQL feedback of midterm exam semester 1 part1

END CASE; (*)

END IF;

ENDCASE;

Incorrect Incorrect. Refer to Section 4.

7. 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.

Incorrect Incorrect. Refer to Section 4.

8. How must you end a CASE expression? Mark for Review

(1) Points

END; (*)

ENDIF;

END CASE;

ENDCASE;
1. Which kind of loop is this?

   ```sql
   i := 10;
   LOOP
     i := i + 1;
     EXIT WHEN i > 30;
   END LOOP;
   ```

   Incorrect Incorrect. Refer to Section 4.

   Mark for Review

   (1) Points

   A FOR loop.

   A WHILE loop.

   A basic loop. (*)

   An infinite loop.

   A nested loop.

2. 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.

3. What are the three kinds of loops in PL/SQL?

   Mark for Review

   (1) Points

   ascending, descending, unordered

   infinite, finite, recursive

   IF, CASE, LOOP
PLSQL feedback of midterm exam semester 1 part1
FOR, WHILE, basic (*)

Incorrect Incorrect. Refer to Section 4.
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 Correct
5. Look at this code:
DECLARE
  v_bool BOOLEAN := TRUE;
  v_date DATE;
BEGIN
  LOOP
    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 Incorrect. Refer to Section 4.
6. Examine the following code:
DECLARE
  v_count NUMBER := 0;
  v_string VARCHAR2(20);
BEGIN
  LOOP
    v_string := v_string || 'x';
  END LOOP;
END;
PL/SQL feedback of midterm exam semester 1 part1

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

xxxxxxxxxxxx

Incorrect Incorrect. Refer to Section 4.

7. What will be displayed when this block is executed?

DECLARE
  v_count NUMBER := 10;
  v_result NUMBER;
BEGIN
  LOOP
    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

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
PLSQL feedback of midterm exam semester 1 part1

A loop (*)

A CASE statement

IF ... END IF;

A Boolean variable.

Incorrect Incorrect. Refer to Section 4.
1. 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

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 Incorrect. Refer to Section 4.
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
PLSQL feedback of midterm exam semester 1 part 1

The block will fail because you cannot change the value of i inside the loop. (*)

Incorrect Incorrect. Refer to Section 4.
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 Incorrect. Refer to Section 4.
5. 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 Incorrect. Refer to Section 4.
6. 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 (*)

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The block will fail because you cannot use DBMS_OUTPUT.PUT_LINE inside a loop.

Incorrect Incorrect. Refer to Section 4.

7. Look at the following block:

```plsql
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

8. 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 (*)

Correct Correct

1. 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
PLSQL feedback of midterm exam semester 1 part1

The outer loop must be labelled if you want to exit the outer loop from within the inner loop (*)

Both loops can have the same label

Correct Correct

2. 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 Correct

3. What will be displayed when the following block is executed?:

DECLARE
x 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
PLSQL feedback of midterm exam semester 1 part1

50 (*)

Incorrect Incorrect. Refer to Section 4.
4. 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;
  END LOOP;

  <<red>> LOOP
    v_red := v_red + 1;
    EXIT WHEN v_red > 10;
  END LOOP;

  -- Line A
  END LOOP;
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 Incorrect. Refer to Section 4.
1. 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.

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;
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.

Incorrect Incorrect. Refer to Section 5.

4. You execute the following code:

```plsql
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.

Incorrect Incorrect. Refer to Section 5.

5. What is wrong with the following code?

```plsql
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;
        EXIT WHEN dept_curs%NOTFOUND;
        DBMS_OUTPUT.PUT_LINE(v_dept_name);
    END LOOP;
    CLOSE dept_curs;
END;
```

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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

6. 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.

Correct Correct

7. 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.

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 (*)
Correct Correct

2. 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;
PLSQL feedback of midterm exam semester 1 part 1

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 Incorrect. Refer to Section 5.
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;
   LOOP
   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));
   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 Incorrect. Refer to Section 5.

2. How must you reference one field which is part of a PL/SQL record? Mark for Review
   (1) Points
   field_name.record_name
   record_name.field_name (*)
PL/SQL feedback of midterm exam semester 1 part 1

record_name(field_name)

field_name OF record_name

It cannot be done.

Incorrect Incorrect. Refer to Section 5.

3. You have declared the following cursor:

```sql
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

```sql
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.

4. Look at these declarations:

```sql
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 (*)
Correct

5. 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

Incorrect. Refer to Section 5.

6. 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

Incorrect

Incorrect. Refer to Section 5.

7. You can reference explicit cursor attributes directly in a SQL statement.
True or False? Mark for Review
(1) Points

True

False (*)

Incorrect

Incorrect. Refer to Section 5.
1. 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.

Incorrect Incorrect. Refer to Section 5

2. 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 ... (*)

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);
END LOOP;
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. (*)
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It should read: DBMS_OUTPUT.PUT_LINE(emp_cursor.last_name);

Nothing is wrong, the code will execute correctly.

Incorrect Incorrect. Refer to Section 5
4. 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 Incorrect. Refer to Section 5
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 ...

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
6. Look at the following code:

DECLARE
CURSOR emp_cursor IS SELECT * FROM employees;
BEGIN
FOR emp_record IN emp_cursor LOOP
DBMS_OUTPUT.PUT_LINE("Point A --");
END LOOP;

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To display the salary of an employee, what code should you write at Point A?

(1) Points

emp_record.salary (*)
emp_cursor.salary
employees.salary
emp_record.employees.salary
TO_CHAR(salary)

Incorrect Incorrect. Refer to Section 5

1. 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 ...

Incorrect Incorrect. Refer to Section 5

2. Look at the following code:

DECLARE
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;
PLSQL feedback of midterm exam semester 1 part1

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. (*)

Incorrect 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? Mark for Review
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 5.

4. 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).

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 Incorrect. Refer to Section 5.

5. What is wrong with the following cursor declaration?
PLSQL feedback of midterm exam semester 1 part1

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) (*)

The parameter should be coded as: (p_loc_id IN NUMBER)

Nothing is wrong, the cursor declaration is correct.

Incorrect Incorrect. Refer to Section 5.

1. 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.

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:

```sql
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

4. You have declared the following cursor:

```sql
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
5. Why can we NOT code:
   INSERT INTO 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   Incorrect. Refer to Section 5.
6. 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.

Correct   Correct
7. You declare a cursor as a join of two tables:
PL/SQL feedback of midterm exam semester 1 part1

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)

Incorrect Incorrect. Refer to Section 5.

1. 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. (*)

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:

```sql
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 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 Incorrect. Refer to Section 5.

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:

```sql
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)

```sql
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;
```

Incorrect Incorrect. Refer to Section 5.

6. Examine the following code:

```sql
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
```

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OPEN region_cur;
LOOP
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
1. 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.

2. In which part of the PL/SQL block are declarations of
variables defined?
Mark for Review
(1) Points

Executable

Exception

Declarative (*)
PLSQL feedback of midterm exam semester 1 part1
Definition

Incorrect Incorrect. Refer to Section 1.

3. 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 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
Object Browser

Incorrect Incorrect. Refer to Section 1.

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

Anonymous
Function (*)
Procedure
6. Given below are the parts of a PL/SQL block:

1. END;
2. EXCEPTION
3. DECLARE
4. BEGIN

Arrange the parts in order.

(1) Points

2,1,4,3
3,4,2,1 (*)
3,2,4,1
4,3,2,1

Incorrect Incorrect. Refer to Section 1.

7. What is the purpose of using DBMS_OUTPUT.PUT_LINE in a PL/SQL block?

(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 Incorrect. Refer to Section 1.

8. Which of the following can you use PL/SQL to do?

(1) Points

Update data (DML)
Develop Web applications using the Web Application Toolkit
PLSQL feedback of midterm exam semester 1 part1

Manage database security

Create customized reports

All of the above (*)

Incorrect 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
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.  
     Incorrect Incorrect. Refer to Section 1.
   - PL/SQL and SQL can be used with many types of databases, including Oracle.  
     Incorrect Incorrect. Refer to Section 1.
   - PL/SQL and SQL are both Oracle proprietary programming languages.  
     Incorrect Incorrect. Refer to Section 1.
   - PL/SQL allows basic program logic and control flow to be combined with SQL statements.  
     Incorrect 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
   - procedural
   - low level

Incorrect Incorrect. Refer to Section 1.

14. A variable must have a value if NOT NULL is specified. True or False? Mark for Review
   (1) Points

   True
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

16. 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. (*)

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. (*)
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

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;

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

20. Examine the following code. Line A causes an exception. 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

Incorrect Incorrect. Refer to Section 2.
21. What will be displayed when the following code is executed?

DECLARE
    varA NUMBER := 12;
BEGIN
    DECLARE
        varB NUMBER := 8;
    BEGIN
        varA := varA + varB;
        END;
    END;
    DBMS_OUTPUT.PUT_LINE(varB);
END;

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;
BEGIN
v_mynumber := 6;

v_mybool := (v_mynumber BETWEEN 10 AND 20);

v_mybool := NOT (v_mybool);
END;

Mark for Review
(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 2.

24. 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
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;

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.

Incorrect Incorrect. Refer to Section 2.

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

True

False (*)

Correct Correct

The DECODE function is available in PL/SQL procedural statements. True or False? Mark for Review

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28. 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  Correct

29. Single row character functions are valid SQL functions in PL/SQL. True or False?  

   Mark for Review

   (1) Points

   True (*)

   False

   Incorrect  Incorrect. Refer to Section 2.

30. Which of the following are PL/SQL lexical units? (Choose two.)  

   Mark for Review

   (1) Points

   (Choose all correct answers)

   Identifiers (*)
PLSQL feedback of midterm exam semester 1 part1

Table Columns

Reserved Words (*)

Anonymous Blocks

SQL Workshop

Incorrect Incorrect. Refer to Section 2.
31. Valid identifiers begin with a Mark for Review
(1) Points

Number

Letter (*)

Special character

Incorrect Incorrect. Refer to Section 2.
32. Which of the following are valid identifiers? (Choose two.)
Mark for Review
(1) Points

(Choose all correct answers)

Full Name

students_street_address (*)

v_code (*)

#hours

completion_%

Incorrect Incorrect. Refer to Section 2.
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   Incorrect. Refer to Section 2.

35. A movie is an example of which category of data type? Mark for Review (1) Points

Scalar

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 (*)
PLSQL feedback of midterm exam semester 1 part1

False

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

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

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

(Choose all correct answers)

v_last_name := Chandra;

v_blackout_date := '31-DEC-2006'; (*)

v_population := 333444; (*)

v_music_type := 'ROCK'; (*)

Incorrect

Incorrect. Refer to Section 2.

40. When a variable is defined using the NOT NULL keywords, the variable must contain a value. True or False? Mark for Review
PLSQL feedback of midterm exam semester 1 part 1

(1) Points

True (*)

False

Correct 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

42. The following anonymous block of code is run:

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. (*)
PLSQL feedback of midterm exam semester 1 part1
Incorrect 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

1. Declare the receiving variables using %TYPE
   
The WHERE clause is optional in nearly all cases. (*)
   
2. 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;

  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;
```

(*)
PLSQL feedback of midterm exam semester 1 part1

Incorrect Incorrect. Refer to Section 3.

45. 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

46. 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;

(*)

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PLSQL feedback of midterm exam semester 1 part1

SELECT salary
INTO v_holdit
FROM employees
WHERE employee_id=100;

Incorrect 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 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 (*)
PLSQL feedback of midterm exam semester 1 part1

Incorrect 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 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 (*)
PLSQL feedback of midterm exam semester 1 part1

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 Incorrect, Refer to Section 1.

7. Every PL/SQL anonymous block must start with the keyword DECLARE. True or False? Mark for Review
   (1) Points

   True

   False (*)

Incorrect Incorrect. Refer to Section 1.

8. In which part of the PL/SQL block are declarations of variables defined? Mark for Review
   (1) Points

   Executable

   Exception

   Declarative (*)

   Definition

Correct Correct
PLSQL feedback of midterm exam semester 1 part1

9. 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 of code will correctly display the message "The cat sat on the mat"? (Choose two.) 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 (*)

Incorrect 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 Incorrect. Refer to Section 1.

14. 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 (*)
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 Incorrect. Refer to Section 2.

16. 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. (*)
- The database name.

Correct Correct

17. Delimiters are _____ that have special meaning to the Oracle database. Mark for Review

(1) Points

- identifiers
- variables
- symbols (*)
18. Which of the following are valid identifiers? (Choose two.)

(Choose all correct answers)

Full Name

students_street_address (*)

v_code (*)

#hours

completion_%

19. Which statements about lexical units are true? (Choose two.)

(Choose all correct answers)

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 (*)

20. What will be displayed when the following code is executed?

```sql
DECLARE
  varA NUMBER := 12;
BEGIN
  DECLARE
    varB NUMBER := 8;
  BEGIN
    varA := varA + varB;
    varA := varA + varB;
  END;
  varA := varA + varB;
END;
```
PLSQL feedback of midterm exam semester 1 part 1

END;
DBMS_OUTPUT.PUT_LINE(varB);
END;

Mark for Review

(1) Points

8

12

Nothing, the block will fail with an error (*)

20

VarB

Correct Correct

21. 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

Correct Correct

22. 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. (*)

Correct Correct

23. In the following code, Line A causes an exception. What
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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
    DBMS_OUTPUT.PUT_LINE(outer_var);
END;

Mark for Review
(1) Points

My

My name (*)

My name is

My name is Zeynep

Incorrect 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
  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

25. A collection is a composite data type. True or False? Mark for Review
(1) Points

True (*)

False

Incorrect

26. 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

27. _____ are meant to store large amounts of data. Mark for Review
(1) Points

Variables

Scalar data types

LOBs (*)
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

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. (*)

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

(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.
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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

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
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?

```plsql
set serveroutput on
DECLARE
  a VARCHAR2(10) := '333';
  b VARCHAR2(10) := '444';
  c PLS_INTEGER;
  d VARCHAR2(10);
BEGIN
  a := 333;
  b := 444;
  c := a;
  d := b;
END;
```
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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 Incorrect. Refer to Section 2.

39. Examine the following code. What is the final value of V_MYBOOL ?

DECLARE
  v_mynumber NUMBER;
  v_mybool BOOLEAN;
BEGIN
  v_mynumber := 6;
  v_mybool := (v_mynumber BETWEEN 10 AND 20);
  v_mybool := NOT (v_mybool);
END;

Mark for Review

(1) Points

True (*)

False

Incorrect Incorrect. Refer to Section 2.

40. 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
PLSQL feedback of midterm exam semester 1 part1

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

Incorrect Incorrect. Refer to Section 2.
41. Given this first section of code:

```sql
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;

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 Incorrect. Refer to Section 3.

42. Which rows will be deleted from the EMPLOYEES table when the following code is executed?

```
DECLARE
  salary employees.salary%TYPE := 12000;
BEGIN
  DELETE FROM employees
  WHERE salary > salary;
END;
```
(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 Incorrect. Refer to Section 3.

43. 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 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;
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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 Incorrect. Refer to Section 3.

45. 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 (*)
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Incorrect 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 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.
49. Assume there are 5 employees in Department 10. What happens when the following statement is executed?

```
UPDATE employees
SET salary=salary*1.1;
```

(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 Incorrect. Refer to Section 3.

50. Which SQL statement can NOT use an implicit cursor?

(1) Points

A DELETE statement

An UPDATE statement

A SELECT statement that returns multiple rows (*)

A SELECT statement that returns one row

Correct Correct

1. 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';
  ELSE
    v_result := 'LOW';
  END IF;
END;
```

What is the final value of v_result?

Mark for Review
PLSQL feedback of midterm exam semester 1 part 1

(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');
  ELSE
    DBMS_OUTPUT.PUT_LINE('OTHER');
  END IF;
END;

Which word will be displayed?

Mark for Review

(1) Points

UNEQUAL

EQUAL

Nothing will be displayed

OTHER (*)

Incorrect Incorrect. Refer to Section 4.

(1) Points

3. How many ELSEIF statements are you allowed to have in a compound IF statement?

Mark for Review

Only one
PL/SQL feedback of midterm exam semester 1 part 1

As many as you want (*)

They must match the same number as the number of ELSE statements.

None; the command is ELSE IF;

Incorrect 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

5. 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 (*)
6. What kind of statement is best suited for displaying the multiplication table for "sixes": 6x1=6, 6x2=12 ... 6x12=72?  
Incorrect. Refer to Section 4.  
(1) Points

   CASE expression

   IF statement

   CASE statement

   LOOP statement (*)

Incorrect. Refer to Section 4.  
(1) Points

7. Which kind of loop is this?

   v_count := 1;
   LOOP
      v_count := v_count + 1;
      EXIT WHEN i > 20;
   END LOOP;

Incorrect. Refer to Section 4.  
(1) Points

   FOR loop

   IF-THEN loop

   Basic loop (*)

   WHILE loop

   CASE loop

Correct

8. Which one of these tasks is best done using a LOOP statement?  
Incorrect. Refer to Section 4.  
(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

9. A PL/SQL block contains the following code:
   v_counter := 1;
   LOOP
     EXIT WHEN v_counter=5;
   END LOOP;
   v_counter := v_counter + 1;

   What is the value of V_COUNTER after the loop is finished?
   (1) Points

   5
   6
   1

   This is an infinite loop; the loop will never finish. (*)

   Correct

10. Which one of these is NOT a kind of loop?
   (1) Points

   ASCENDING loop (*)
   FOR loop
   Basic loop
   WHILE loop

   Incorrect

11. What will be the value of v_sal_desc after the following code is executed?

   Incorrect

   Incorrect. Refer to Section 4.

   Mark for Review

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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

    Null

    The code will fail and return an exception (*)

Incorrect Incorrect. Refer to Section 4.

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
            WHEN v_grade = 'A' THEN 'Very Good'
            WHEN 'A' THEN 'Very Good';
            WHEN 'A' THEN v_result := 'Very Good';
            WHEN 'A' THEN 'Very Good' (*)
        END CASE;

The next line should be
Mark for Review
(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 Incorrect. Refer to Section 4.

13. What will be the value of variable c after the following code is executed?
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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 Incorrect. Refer to Section 4.

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
  IF a AND b THEN c := 2;
    ELSEIF a OR b THEN c := 0;
    ELSE c := 1;
  END IF;
END;

Mark for Review
(1) Points

1
Null
0 (*)
2
PL/SQL feedback of midterm exam semester 1 part 1

Incorrect Incorrect. Refer to Section 4.

15. What value will v_answer contain after the following code is executed?

```plsql
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:

```plsql
DECLARE
  v_bool BOOLEAN := FALSE;
  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 (*)

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Incorrect Incorrect. Refer to Section 4.

17. In a FOR loop, an implicitly declared counter automatically increases or decreases with each iteration. True or False?  
   Mark for Review  
   (1) Points  
   
   True (*)  
   
   False  

Incorrect Incorrect. Refer to Section 4.

18. Which statement best describes when a FOR loop should be 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 Incorrect. Refer to Section 4.

19. Which statement best describes when a WHILE loop should be used?  
   Mark for Review  
   (1) Points  
   
   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 Incorrect. Refer to Section 4.

20. In a WHILE loop, the statements inside the loop must execute at least once. True or False?  
   Mark for Review  
   Page 489
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(1) Points

True

False (*)

Incorrect Incorrect. Refer to Section 4.

21. 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;

(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 Incorrect. Refer to Section 4.

22. What kinds of loops can be nested? Mark for Review

(1) Points

BASIC loops

WHILE loops

FOR loops

All of the above (*)

Incorrect Incorrect. Refer to Section 4.

23. When coding two nested loops, both loops must be of the same type. For example, you cannot code a FOR loop inside a WHILE loop. True or False? Mark for Review

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24. In the following code fragment, you want to exit from the outer loop at Line A if \( v\_number = 6 \). Which statement would you write on Line A?

```plsql
WHILE condition_1 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 Incorrect. Refer to Section 4.

25. Examine the following code:

```plsql
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

35

6
Section 5

26. What is wrong with the following code?

```plsql
DECLARE
  CURSOR emp_curs(p_dept_id NUMBER) IS
    SELECT * FROM employees WHERE department_id = p_dept_id;
BEGIN
  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.

Nothing is wrong. The block will execute successfully and display all departments and the employees in those departments. (*)

Correct  Correct

27. When using multiple nested cursors, what kinds of loops can you use?

Mark for Review

(1) Points

Cursor FOR loops only.

Basic loops only.

WHILE loops only.
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None of the above.

All of the above. (*)

Incorrect Incorrect. Refer to Section 5.

28. You want to display all locations, and the departments in each location. Examine the following code:

```
DECLARE
  CURSOR loc_curs IS SELECT * FROM locations;
  CURSOR dept_curs(p_loc_id NUMBER) IS
    SELECT * FROM departments WHERE location_id = p_loc_id;
BEGIN
  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

null

LOOP ... END LOOP;

loc_rec.location_id (*)

Incorrect Incorrect. Refer to Section 5.

29. Assume that you have declared a cursor called C_EMP. Which of the following statements about C_EMP is correct? (Choose two.) Mark for 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

30. Which of the following statements about the %ISOPEN cursor attribute is true? Mark for Review
(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

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;
...
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
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 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 ...);
  &nbsp...

To display the fetched last name, what should you code at Point A? Mark for Review
(1) Points

- v_emp_rec.last_name (*)
- v_emp_rec(last_name)
- v_emp_rec
- last_name
- None of the above

Incorrect Incorrect. Refer to Section 5.

34. Which of the following cursor attributes evaluates to TRUE if the cursor is open? Mark for Review
(1) Points

- %ISOPEN
- %NOTFOUND
- %FOUND
- %OPEN
- %ROWCOUNT (*)
- None of the above

Incorrect Incorrect. Refer to Section 5.
PLSQL feedback of midterm exam semester 1 part1

%ISOPEN (*)

%NOTFOUND

%FOUND

%ROWCOUNT

Incorrect Incorrect. Refer to Section 5.

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;
  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.

  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
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False (*)

Correct Correct

37. Place the following statements in the correct sequence:

1. OPEN my_curs;
2. CLOSE my_curs;
3. 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 Incorrect. Refer to Section 5.

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True (*)

False

Incorrect Incorrect. Refer to Section 5.

For which type of SQL statement must you use an explicit cursor?

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.

Incorrect Incorrect. Refer to Section 5.

What will happen when the following code is executed?

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.
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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;
BEGIN
  ...
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;

Incorrect Incorrect. Refer to Section 5.

43. The following code fragment shows a cursor FOR loop:

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 ...
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emp_record emp_cursor%ROWTYPE; (*)

FETCH emp_cursor INTO emp_record; (*)

END LOOP;

Incorrect Incorrect. Refer to Section 5

44. What is wrong with the following code?

DECLARE
  CURSOR dept_curs IS SELECT * FROM departments;
BEGIN
  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);
END;

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.

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.
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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? 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 has not unlocked the row.

Incorrect     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 CURRENTNOWAIT attribute is set to TRUE.

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;

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.
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?  

Correct: Write 12 separate PL/SQL blocks, each declaring a cursor with a different JOB_ID in the WHERE clause.

Correct: Write a single PL/SQL block which declares 12 cursors, one for each distinct value of JOB_ID.

Correct: Write a single PL/SQL block which declares one cursor using a parameter for the JOB_ID. (*)

Correct: 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: Incorrect. Refer to Section 5.