1. Which SQL function can be used to remove heading or trailing characters (or both) from a character string? Mark for Review
(1) Points

LPAD

CUT

NVL2

TRIM (*)

Correct

2. Which three statements about functions are true? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

The SYSDATE function returns the Oracle Server date and time. (*)

The ROUND number function rounds a value to a specified decimal place or the nearest whole number. (*)

The CONCAT function can only be used on character strings, not on numbers.

The SUBSTR character function returns a portion of a string beginning at a defined character position to a specified length. (*)

Correct

You query the database with this SQL statement:

```
SELECT LOWER(SUBSTR(CONCAT(last_name, first_name)), 1, 5) "ID"
FROM employee;
```

In which order are the functions evaluated?
Mark for Review
(1) Points

LOWER, SUBSTR, CONCAT

LOWER, CONCAT, SUBSTR

SUBSTR, CONCAT, LOWER

CONCAT, SUBSTR, LOWER (*)

Correct

4. The STYLES table contains this data:

STYLE_ID STYLE_NAME CATEGORY COST
895840 SANDAL 85940 12.00
968950 SANDAL 85909 10.00
869506 SANDAL 89690 15.00
809090 LOAFER 89098 10.00
890890 LOAFER 89789 14.00
857689 HEEL 85940 11.00
758960 SANDAL 86979 11.00

You query the database and return the value 40. Which script did you use?
Mark for Review
(1) Points

SELECT INSTR(category, 2,2)
FROM styles
WHERE style_id = 895840;

SELECT INSTR(category, -2,2)
FROM styles
WHERE style_id = 895840;

SELECT SUBSTR(category, 2,2)
FROM styles
WHERE style_id = 895840;
(*)

SELECT SUBSTR(category, -2,2)
FROM styles
WHERE style_id = 758960;

Correct

You issue this SQL statement:

```
SELECT INSTR ('organizational sales', 'al')
FROM dual;
```

Which value is returned by this command?
Mark for Review
(1) Points

1

2

13 (*)

17

Correct

6. You need to display the number of characters in each customer's last name. Which function should you use? Mark for Review
(1) Points

LENGTH (*)

LPAD

COUNT

SUBSTR

Correct

7. What will the following SQL statemtent display?

```
SELECT last_name, LPAD(salary, 15, '$')SALARY
FROM employees;
```

Mark for Review
(1) Points

The last name of employees that have a salary that includes a $ in the value, size of 15 and the column labeled SALARY.

The last name and the format of the salary limited to 15 digits to the left of the decimal and the column labeled SALARY.

The last name and salary for all employees with the format of the salary 15 characters long, left-padded with the $ and the column labeled SALARY. (*)

The query will result in an error: "ORA-00923: FROM keyword not found where expected."

Correct

. You issue this SQL statement:

SELECT ROUND (1282.248, -2)
FROM dual;

What value does this statement produce?
Mark for Review
(1) Points

1200

1282

1282.25

1300 (*)

Correct

9. Evaluate this function: MOD (25, 2) Which value is returned? Mark for Review
(1) Points

1 (*)

2

25

0

Correct

10. Which comparison operator retrieves a list of values? Mark for Review
(1) Points

IN (*)

LIKE

BETWEEN...IN...

IS NULL

Incorrect. Refer to Section 1 Lesson 1

11. Which function would you use to return the current database server date and time? Mark for Review
(1) Points

DATE

SYSDATE (*)

DATETIME

CURRENTDATE

Correct

12. You need to display the number of months between today's date and each employee's hiredate. Which function should you use? Mark for Review
(1) Points

ROUND

BETWEEN

ADD_MONTHS

MONTHS_BETWEEN (*)

Correct

13. You need to subtract three months from the current date. Which function should you use? Mark for Review
(1) Points

ROUND

TO_DATE

ADD_MONTHS (*)

MONTHS_BETWEEN

Incorrect. Refer to Section 1

14. Which of the following Date Functions will add calendar months to a date? Mark for Review
(1) Points

Months + Calendar (Month)

ADD_MONTHS (*)

MONTHS + Date

NEXT_MONTH

Correct

15. Evaluate this SELECT statement:

```
SELECT SYSDATE + 30
FROM dual;
```

Which value is returned by the query?
Mark for Review
(1) Points

the current date plus 30 hours

the current date plus 30 days (*)

the current date plus 30 months

No value is returned because the SELECT statement generates an error.

Incorrect. Refer to Section 1

16. Which SQL Statement should you use to display the prices in this format: "$00.30"? Mark for Review
(1) Points

SELECT TO_CHAR(price, '$99,900.99') FROM product; (*)

SELECT TO_CHAR(price, "$99,900.99") FROM product;

SELECT TO_CHAR(price, '$99,990.99') FROM product;

SELECT TO_NUMBER(price, '$99,900.99') FROM product;

Correct

17. All Human Resources data is stored in a table named EMPLOYEES. You have been asked to create a report that displays each employee's name and salary. Each employee's salary must be displayed in the following format: $000,000.00. Which function should you include in a SELECT statement to achieve the desired result?
Mark for Review
(1) Points

TO_CHAR (*)

TO_DATE

TO_NUMBER

CHARTOROWID

Incorrect. Refer to Section 2

18. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
HIRE_DATE DATE

You need to display HIRE_DATE values in this format:

January 28, 2000

Which SELECT statement could you use?
Mark for Review
(1) Points

SELECT TO_CHAR(hire_date, Month DD, YYYY)
FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD, YYYY')
FROM employees;
(*)

SELECT hire_date(TO_CHAR 'Month DD', ' YYYY')

FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD', ' YYYY')
FROM employees;

Incorrect. Refer to Section 2

19. Which two statements concerning SQL functions are true? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

Character functions can accept numeric input.

Not all date functions return date values. (*)

Number functions can return number or character values.

Conversion functions convert a value from one data type to another data type. (*)

Single-row functions manipulate groups of rows to return one result per group of rows.

Incorrect. Refer to Section 2

20. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
SALARY NUMBER(6)

You need to create a report to display the salaries of all employees. Which script should you use to display the salaries in format: "$45,000.00"?
Mark for Review
(1) Points

SELECT TO_CHAR(salary, '$999,999')
FROM employees;

SELECT TO_NUM(salary, '$999,990.99')
FROM employees;

SELECT TO_NUM(salary, '$999,999.00')
FROM employees;

SELECT TO_CHAR(salary, '$999,999.00')
FROM employees;
(*)

Incorrect. Refer to Section 2

21. If you use the RR format when writing a query using the date 27-OCT-17 and the year is 2001, what year would be the result? Mark for Review
(1) Points

2001

1901

2017 (*)

1917

Correct

22. Which of the following General Functions will return the first non-null expression in the expression list? Mark for Review
(1) Points

NVL

NVL2

NULLIF

COALESCE (*)

Correct

23. When executed, which statement displays a zero if the TUITION_BALANCE value is zero and the HOUSING_BALANCE value is null? Mark for Review
(1) Points

SELECT NVL (tuition_balance + housing_balance, 0) "Balance Due"
FROM student_accounts;

(*)

SELECT NVL(tuition_balance, 0), NVL (housing_balance), tuition_balance + housing_balance "Balance Due"
FROM student_accounts;

SELECT tuition_balance + housing_balance
FROM student_accounts;

SELECT TO_NUMBER(tuition_balance, 0), TO_NUMBER (housing_balance, 0), tutition_balance + housing_balance "Balance Due"
FROM student_accounts;

Incorrect. Refer to Section 2

24. Which statement about group functions is true? Mark for Review
(1) Points

NVL and NVL2, but not COALESCE, can be used with group functions to replace null values.

NVL and COALESCE, but not NVL2, can be used with group functions to replace null values.

NVL, NVL2, and COALESCE can be used with group functions to replace null values. (*)

COALESCE, but not NVL and NVL2, can be used with group functions to replace null values.

Correct

25. When joining 3 tables in a SELECT statement, how many join conditions are needed in the WHERE clause? Mark for Review
(1) Points

0

1

2 (*)

3

Correct

26. You need to create a report that lists all employees in the Sales department who do not earn $25,000 per year. Which query should you issue to accomplish this task?
Mark for Review
(1) Points

SELECT last_name, first_name, salary
FROM employees
WHERE salary > 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary = 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary <= 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary != 25000 AND dept_id = 10;
(*)

Correct

27. The CUSTOMERS and SALES tables contain these columns:
CUSTOMERS
CUST_ID NUMBER(10) PRIMARY KEY
COMPANY VARCHAR2(30)
LOCATION VARCHAR2(20)

SALES
SALES_ID NUMBER(5) PRIMARY KEY
CUST_ID NUMBER(10) FOREIGN KEY
TOTAL_SALES NUMBER(30)

Which SELECT statement will return the customer ID, the company and the total sales?

Mark for Review
(1) Points

```
   SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id (+);
```

```
   SELECT cust_id, company, total_sales
FROM customers, sales
WHERE cust_id = cust_id;
```

```
   SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;
```
(*)

```
   SELECT cust_id, company, total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;
```

Correct

28. Your have two tables named EMPLOYEES and SALES. You want to identify the sales representatives who have generated at least $100,000 in revenue.
Which query should you issue? Mark for Review
(1) Points

```
   SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;
```

```
   SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue >= 100000;
```
(*)

```
   SELECT e.fname, e.lname, s.sales
FROM employees, sales
WHERE e.emp_id = s.emp_id AND revenue >= 100000;
```

```
   SELECT fname, lname, sales
Q FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;
```

Correct

29. What happens when you create a Cartesian product? Mark for Review
(1) Points

All rows from one table are joined to all rows of another table (*)

The table is joined to itself, one column to the next column, exhausting all possibilities

The table is joined to another equal table

All rows that do not match in the WHERE clause are displayed

Incorrect. Refer to Section

30. Which statement about the join syntax of a SELECT statement is true? Mark for Review
(1) Points

The ON keyword must be included.

The JOIN keyword must be included.

The FROM clause represents the join criteria.

The WHERE clause represents the join criteria. (*)

Incorrect. Refer to Section 3

31. Which statement about outer joins is true? Mark for Review
(1) Points

The tables must be aliased.

The FULL, RIGHT, or LEFT keyword must be included.

The OR operator cannot be used to link outer join conditions. (*)

Outer joins are always evaluated before other types of joins in the query.

Correct

32. Evaluate this SELECT statement:

```
SELECT p.player_id, m.last_name, m.first_name, t.team_name
FROM player p
```

```
LEFT OUTER JOIN player m ON (p.manager_id = m.player_id)
LEFT OUTER JOIN team t ON (p.team_id = t.team_id);
```

Which join is evaluated first?
Mark for Review
(1) Points

the self-join of the player table (*)

the join between the player table and the team table on TEAM_ID

the join between the player table and the team table on MANAGER_ID

the join between the player table and the team table on PLAYER_ID

Correct

33. Which two operators can be used in an outer join condition using the outer join operator (+)? Mark for Review
(1) Points

AND and = (*)

OR and =

BETWEEN...AND... and IN

IN and =

Incorrect. Refer to Section 3

34. Which statement about a natural join is true? Mark for Review
(1) Points

Columns with the same names must have identical data types.

Columns with the same names must have the same precision and datatype. (*)

Columns with the same names must have compatible data types.

Columns with the same names cannot be included in the SELECT list of the query.

Incorrect. Refer to Section 4

35. You need to join all the rows in the EMPLOYEE table to all the rows in the EMP_REFERENCE table. Which type of join should you create? Mark for Review
(1) Points

An equijoin

A cross join (*)

An inner join

A full outer join

Incorrect. Refer to Section 4

36. Which of the following best describes a natural join? Mark for Review
(1) Points

A join between two tables that includes columns that share the same name, datatypes and lengths (*)

A join that produces a Cartesian product

A join between tables where matching fields do not exist

A join that uses only one table

Correct

37. Which SELECT clause creates an equijoin by specifying a column name common to both tables? Mark for Review
(1) Points

A HAVING clause

The FROM clause

The SELECT clause

A USING clause (*)

Correct

38. Which of the following statements is the simplest description of a nonequijoin? Mark for Review
(1) Points

A join condition containing something other than an equality operator (*)

A join condition that is not equal to other joins.

A join condition that includes the (+) on the left hand side.

A join that joins a table to itself

Incorrect. Refer to Section 4

39. You created the CUSTOMERS and ORDERS tables by issuing these CREATE TABLE statements in sequence:

```
CREATE TABLE customers
(custid varchar2(5),
companyname varchar2(30),
contactname varchar2(30),
address varchar2(30),
city varchar2(20),
state varchar2(30),
phone varchar2(20),
constraint pk_customers_01 primary key (custid));

CREATE TABLE orders
(orderid varchar2(5) constraint pk_orders_01 primary key,
orderdate date,
total number(15),
custid varchar2(5) references customers (custid));
```

You have been instructed to compile a report to present the information about orders placed by customers who reside in Nashville . Which query should you issue to achieve the desired results?

Mark for Review

(1) Points

```
SELECT custid, companyname
FROM customers
WHERE city = 'Nashville';
```

```
SELECT orderid, orderdate, total
FROM orders o
NATURAL JOIN customers c ON o.custid = c.custid
WHERE city = 'Nashville';
```

```
SELECT orderid, orderdate, total
FROM orders o
JOIN customers c ON o.custid = c.custid
WHERE city = 'Nashville';
```

(*)

```
   SELECT orderid, orderdate, total
FROM orders
WHERE city = 'Nashville';
```

Correct

40. Below find the structure of the CUSTOMERS and SALES_ORDER tables:

CUSTOMERS
CUSTOMER_ID NUMBER NOT NULL, Primary Key
CUSTOMER_NAME VARCHAR2 (30)
CONTACT_NAME VARCHAR2 (30)
CONTACT_TITLE VARCHAR2 (20)
ADDRESS VARCHAR2 (30)
CITY VARCHAR2 (25)
REGION VARCHAR2 (10)
POSTAL_CODE VARCHAR2 (20)
COUNTRY_ID NUMBER Foreign key to COUNTRY_ID column of the COUNTRY table
PHONE VARCHAR2 (20)
FAX VARCHAR2 (20)
CREDIT_LIMIT NUMBER(7,2)

SALES_ORDER
ORDER_ID NUMBER NOT NULL, Primary Key
CUSTOMER_ID NUMBER Foreign key to CUSTOMER_ID column of the CUSTOMER table
ORDER_DT DATE
ORDER_AMT NUMBER (7,2)
SHIP_METHOD VARCHAR2 (5)

You need to create a report that displays customers without a sales order. Which statement could you use?
Mark for Review
(1) Points

```
   SELECT c.customer_name
FROM customers c
WHERE c.customer_id not in (SELECT s.customer_id FROM sales_order s);
```
(*)

```
   SELECT c.customer_name
FROM customers c, sales_order s
WHERE c.customer_id = s.customer_id(+);
```

SELECT c.customer_name
FROM customers c, sales_order s
WHERE c.customer_id (+) = s.customer_id;

SELECT c.customer_name
FROM customers c
RIGHT OUTER JOIN sales_order s ON (c.customer_id = s.customer_id);

Incorrect. Refer to Section 4

41. Which query will retrieve all the rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table? Mark for Review
(1) Points

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
RIGHT OUTER JOIN departments d ON (e.department_id = d.department_id);

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
NATURAL JOIN departments d;

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
LEFT OUTER JOIN departments d ON (e.department_id = d.department_id);
(*)

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
JOIN departments d USING (e.department_id = d.department_id);

Incorrect. Refer to Section 4

42. Which two sets of join keywords create a join that will include unmatched rows from the first table specified in the SELECT statement? Mark for Review
(1) Points

LEFT OUTER JOIN and FULL OUTER JOIN (*)

RIGHT OUTER JOIN and LEFT OUTER JOIN

USING and HAVING

OUTER JOIN and USING

Incorrect. Refer to Section 4

43. What should be included in a SELECT statement to return NULL values from all tables? Mark for Review
(1) Points

natural joins

left outer joins

full outer joins (*)

right outer joins

Incorrect. Refer to Section 4

44. If a select list contains both a column as well as a group function then what clause is required? Mark for Review
(1) Points

having clause

join clause

order by clause

group by clause (*)

Incorrect. Refer to Section 5

45. Evaluate this SELECT statement:
SELECT MAX(salary), dept_id
FROM employee
GROUP BY dept_id;

Which values are displayed?
Mark for Review
(1) Points

The highest salary for all employees.

The highest salary in each department. (*)

The employees with the highest salaries.

The employee with the highest salary for each department.

Incorrect. Refer to Section 5

46. Which statement about group functions is true? Mark for Review
(1) Points

Group functions ignore null values. (*)

Group functions can only be used in a SELECT list.

Group functions can be used in a WHERE clause.

A query that includes a group function in the SELECT list must include a GROUP BY clause.

Incorrect. Refer to Section 5

47. What is the best explanation as to why this SQL statement will NOT execute?
SELECT department_id "Department", AVG (salary)"Average"
FROM employees
GROUP BY Department;
Mark for Review
(1) Points

Salaries cannot be averaged as not all the numbers will divide evenly.

You cannot use a column alias in the GROUP BY clause. (*)

The GROUP BY clause must have something to GROUP.

The department id is not listed in the departments table.

Incorrect. Refer to Section 5

48. The AVG, SUM, VARIANCE, and STDDEV functions can be used with which of the following? Mark for Review
(1) Points

Only numeric data types (*)

Integers only

Any data type

All except numeric

Correct

49. Examine the data in the PAYMENT table:
PAYMENT_ID CUSTOMER_ID PAYMENT_DATE PAYMENT_TYPE PAYMENT_AMOUNT
86590586 8908090 10-JUN-03 BASIC 859.00
89453485 8549038 15-FEB-03 INTEREST 596.00
85490345 5489304 20-MAR-03 BASIC 568.00

You need to determine the average payment amount made by each customer in January, February and March of 2003. Which SELECT statement should you use?
Mark for Review
(1) Points

SELECT AVG(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '31-MAR-2003';
(*)

SELECT AVG(payment_amount)
FROM payment;

SELECT SUM(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' and '31-MAR-2003';

SELECT AVG(payment_amount)
FROM payment
WHERE TO_CHAR(payment_date) IN (JAN, FEB, MAR);

Correct

50. You need to calculate the standard deviation for the cost of products produced in the Birmingham facility. Which group function will you use? Mark for Review
(1) Points

STDEV

STDDEV (*)

VAR_SAMP

VARIANCE

Incorrect. Refer to Section 5

51. The VENDORS table contains these columns:
VENDOR_ID NUMBER Primary Key
NAME VARCHAR2(30)
LOCATION_ID NUMBER
ORDER_DT DATE
ORDER_AMOUNT NUMBER(8,2)

Which two clauses represent valid uses of aggregate functions for this table?
Mark for Review
(1) Points

(Choose all correct answers)

FROM MAX(order_dt)

SELECT SUM(order_dt)

SELECT SUM(order_amount) (*)

WHERE MAX(order_dt) = order_dt

SELECT location_id, MIN(AVG(order_amount)) (*)

Incorrect. Refer to Section 5

52. Which group function would you use to display the lowest value in the SALES_AMOUNT column? Mark for Review
(1) Points

AVG

COUNT

MAX

MIN (*)

Incorrect. Refer to Section 5

53. You need to calculate the average salary of employees in each department. Which group function will you use? Mark for Review
(1) Points

AVG (*)

MEAN

MEDIAN

AVERAGE

Correct

54. Which group functions below act on character, number and date data types? (Choose more than one answer) Mark for Review
(1) Points

(Choose all correct answers)

SUM

MAX (*)

MIN (*)

AVG

COUNT (*)

Correct

55. The PRODUCTS table contains these columns:
PROD_ID NUMBER(4)
PROD_NAME VARCHAR2(30)
PROD_CAT VARCHAR2(30)
PROD_PRICE NUMBER(3)
PROD_QTY NUMBER(4)

The following statement is issued:

```
SELECT AVG(prod_price, prod_qty)
FROM products;
```

What happens when this statement is issued?
Mark for Review
(1) Points

Both the average price and the average quantity of the products are returned.

Only the average quantity of the products is returned.

The values in the PROD_PRICE column and the PROD_QTY column are averaged together.

An error occurs. (*)

Incorrect. Refer to Section 5

56. The STYLES table contains this data:

STYLE_ID	STYLE_NAME	CATEGORY	COST
895840	SANDAL	85940	12.00
968950	SANDAL	85909	10.00
869506	SANDAL	89690	15.00
809090	LOAFER	89098	10.00
890890	LOAFER	89789	14.00
857689	HEEL	85940	11.00
758960	SANDAL	86979	

You issue this SELECT statement:

```
SELECT COUNT(category)
FROM styles;
```

Which value is displayed?
Mark for Review
(1) Points

0

6

7 (*)

The statement will NOT execute successfully.

Incorrect. Refer to Section 5

57. Examine the data from the LINE_ITEM table:

LINE_ITEM_ID	ORDER_ID	PRODUCT_ID	PRICE	DISCOUNT
890898	847589	848399	8.99	0.10
768385	862459	849869	5.60	0.05
867950	985490	945809	5.60	
954039	439203	438925	5.25	0.15
543949	349302	453235	4.50	

You query the LINE_ITEM table and a value of 5 is returned. Which SQL statement did you execute?
Mark for Review
(1) Points

SELECT COUNT(discount) FROM line_item;

SELECT COUNT(*) FROM line_item; (*)

SELECT SUM(discount) FROM line_item;

SELECT AVG(discount) FROM line_item;

Incorrect. Refer to Section 5

58. Group functions can avoid computations involving duplicate values by including which keyword? Mark for Review
(1) Points

NULL

DISTINCT (*)

SELECT

UNLIKE

Incorrect. Refer to Section 5

59. Evaluate this SELECT statement:
SELECT COUNT(*)
FROM products;

Which statement is true?
Mark for Review
(1) Points

The number of rows in the table is displayed. (*)

The number of unique PRODUCT_IDs in the table is displayed.

An error occurs due to an error in the SELECT clause.

An error occurs because no WHERE clause is included in the SELECT statement.

Incorrect. Refer to Section 5

60. The PLAYERS table contains these columns:
PLAYER_ID NUMBER PK
PLAYER_NAME VARCHAR2 (30)
TEAM_ID NUMBER
HIRE_DATE DATE
SALARY NUMBER (8,2)

Which two clauses represent valid uses of aggregate functions? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

ORDER BY AVG(salary)

GROUP BY MAX(salary) (*)

SELECT AVG(NVL(salary, 0)) (*)

HAVING MAX(salary) > 10000 (*)

WHERE hire_date > AVG(hire_date)

Incorrect. Refer to Section 6

61. The MANUFACTURER table contains these columns:
MANUFACTURER_ID NUMBER
MANUFACTURER_NAME VARCHAR2(30)
TYPE VARCHAR2(25)
LOCATION_ID NUMBER

You need to display the number of unique types of manufacturers at each location.
Which SELECT statement should you use?
Mark for Review
(1) Points

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY location_id;
(*)

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer;

SELECT location_id, COUNT(type)
FROM manufacturer

GROUP BY location_id;

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY type;

Correct

62. What is the correct order of clauses in a SELECT statement? Mark for Review (1) Points

SELECT
FROM
WHERE
ORDER BY
HAVING

SELECT
FROM
HAVING
GROUP BY
WHERE
ORDER BY

SELECT
FROM
WHERE
GROUP BY
HAVING
ORDER BY
(*)

SELECT
FROM
WHERE
HAVING
ORDER BY
GROUP BY

Correct

63. The PRODUCTS table contains these columns:

PROD_ID NUMBER(4)
PROD_NAME VARCHAR(20)
PROD_CAT VARCHAR2(15)
PROD_PRICE NUMBER(5)
PROD_QTY NUMBER(4)

You need to identify the minimum product price in each product category.
Which statement could you use to accomplish this task?
Mark for Review
(1) Points

SELECT prod_cat, MIN (prod_price)
FROM products
GROUP BY prod_price;

SELECT prod_cat, MIN (prod_price)
FROM products
GROUP BY prod_cat;
(*)

SELECT MIN (prod_price), prod_cat
FROM products
GROUP BY MIN (prod_price), prod_cat;

SELECT prod_price, MIN (prod_cat)
FROM products
GROUP BY prod_cat;

Correct

64. The EMPLOYEES table contains these columns:
ID_NUMBER NUMBER Primary Key
NAME VARCHAR2 (30)
DEPARTMENT_ID NUMBER
SALARY NUMBER (7,2)
HIRE_DATE DATE

Evaluate this SQL statement:

SELECT id_number, name, department_id, SUM(salary)
FROM employees
WHERE salary > 25000
GROUP BY department_id, id_number, name
ORDER BY hire_date;

Why will this statement cause an error?
Mark for Review
(1) Points

The HAVING clause is missing.

The WHERE clause contains a syntax error.

The SALARY column is NOT included in the GROUP BY clause.

The HIRE_DATE column is NOT included in the GROUP BY clause. (*)

Correct

65. Evaluate this SELECT statement:

```
SELECT SUM(salary), dept_id, department_name
FROM employee
WHERE dept_id = 1
GROUP BY department;
```

Which clause of the SELECT statement contains a syntax error?
Mark for Review
(1) Points

SELECT

FROM

WHERE

GROUP BY (*)

Incorrect. Refer to Section

66. The PLAYERS and TEAMS tables contain these columns:

PLAYERS
PLAYER_ID NUMBER NOT NULL, Primary Key
LAST_NAME VARCHAR2 (30) NOT NULL
FIRST_NAME VARCHAR2 (25) NOT NULL
TEAM_ID NUMBER
POSITION VARCHAR2 (25)

TEAMS
TEAM_ID NUMBER NOT NULL, Primary Key
TEAM_NAME VARCHAR2 (25)

You need to create a report that lists the names of each team with more than five pitchers.

Which SELECT statement will produce the desired result?
Mark for Review
(1) Points

SELECT t.team_name, COUNT(p.player_id)
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name;

SELECT t.team_name, COUNT(p.player_id)
FROM players JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER' HAVING COUNT(p.player_id) > 5;

SELECT t.team_name, COUNT(p.player_id)
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;

SELECT t.team_name, COUNT(p.player_id)
FROM players p JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;
(*)

Incorrect. Refer to Section 6

67. Which statement about the GROUP BY clause is true? Mark for Review
(1) Points

To exclude rows before dividing them into groups using the GROUP BY clause, you use should a WHERE clause. (*)

You can use a column alias in a GROUP BY clause.

By default, rows are not sorted when a GROUP BY clause is used.

You must use the HAVING clause with the GROUP BY clause.

Incorrect. Refer to Section 6

68. Using a subquery in which clause will return a syntax error? Mark for Review
(1) Points

WHERE

FROM

HAVING

There are no places you cannot place subqueries. (*)

Incorrect. Refer to Section 6

69. Which of the following is TRUE regarding the order of subquery execution?
Mark for Review
(1) Points

The outer query is executed first

The subquery executes once after the main query

The subquery executes once before the main query (*)

The result of the main query is used with the subquery

Correct

70. The TEACHERS and CLASS_ASSIGNMENTS tables contain these columns:
TEACHERS
TEACHER_ID NUMBER(5) Primary Key
NAME VARCHAR2 (25)
SUBJECT_ID NUMBER(5)

CLASS_ASSIGNMENTS
CLASS_ID NUMBER (5) Primary Key
TEACHER_ID NUMBER (5)
START_DATE DATE
MAX_CAPACITY NUMBER (3)

All MAX_CAPACITY values are greater than 10. Which two SQL statements correctly use subqueries? (Choose two.)
Mark for Review
(1) Points

(Choose all correct answers)

SELECT *
FROM class_assignments
WHERE max_capacity = (SELECT AVG(max_capacity) FROM class_assignments);
(*)

```
   SELECT *
FROM teachers
WHERE teacher_id = (SELECT teacher_id FROM class_assignments WHERE
class_id = 45963);
```
(*)

```
   SELECT *
FROM teachers
WHERE teacher_id = (SELECT teacher_id FROM class_assignments WHERE
max_capacity > 0);
```

```
   SELECT *
FROM teachers
WHERE teacher_id LIKE (SELECT teacher_id FROM class_assignments WHERE
max_capacity > 0);
```

```
   SELECT *
FROM class_assignments
WHERE max_capacity = (SELECT AVG(max_capacity) FROM class_assignments
GROUP BY teacher_id);
```

Incorrect. Refer to Section 6

71. The EMPLOYEES and ORDERS tables contain these columns:

```
EMPLOYEES
EMP_ID NUMBER(10) NOT NULL PRIMARY KEY
FNAME VARCHAR2(30)
LNAME VARCHAR2(30)
ADDRESS VARCHAR2(25)
CITY VARCHAR2(20)
STATE VARCHAR2(2)
ZIP NUMBER(9)
TELEPHONE NUMBER(10)

ORDERS
ORDER_ID NUMBER(10) NOT NULL PRIMARY KEY
EMP_ID NUMBER(10) NOT NULL FOREIGN KEY
ORDER_DATE DATE
TOTAL NUMBER(10)
```

Which SELECT statement will return all orders generated by a sales representative named Franklin during the year 2001?

Mark for Review

(1) Points

SELECT order_id, total
FROM ORDERS (SELECT emp_id FROM employees WHERE lname = 'Franklin')
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01';

SELECT (SELECT emp_id FROM employees WHERE lname = 'Franklin') AND
order_id, total
FROM ORDERS
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01';

SELECT order_id, emp_id, total
FROM ORDERS
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01' AND emp_id =
'Franklin';

SELECT order_id, total
FROM ORDERS
WHERE emp_id = (SELECT emp_id FROM employees WHERE lname = 'Franklin')
AND order_date BETWEEN '01-jan-01' AND '31-dec-01';
(*)

Correct

72. the structures of the CUSTOMER and ORDER_HISTORY tables:
CUSTOMER
CUSTOMER_ID NUMBER(5)
NAME VARCHAR2(25)
CREDIT_LIMIT NUMBER(8,2)
OPEN_DATE DATE

ORDER_HISTORY
ORDER_ID NUMBER(5)
CUSTOMER_ID NUMBER(5)
ORDER_DATE DATE
TOTAL NUMBER(8,2)

Which of the following scenarios would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the date each customer account was opened.

You need to display each date that a customer placed an order.

You need to display all the orders that were placed on a certain date.

You need to display all the orders that were placed on the same day as order number 25950. (*)

Incorrect. Refer to Section 6

73. You need to produce a report that contains all employee-related information for those employees who have Brad Carter as a supervisor. However, you are not sure which supervisor ID belongs to Brad Carter. Which query should you issue to accomplish this task? Mark for Review
(1) Points

```
SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');
```

```
SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');
```

```
SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT employee_id
    FROM supervisors
    WHERE last_name = 'Carter');
```

```
SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT employee_id
    FROM employees
    WHERE last_name = 'Carter');
```
(*)

Incorrect. Refer to Section 6

74. If a single-row subquery returns a null value and uses the equality comparison operator, what will the outer query return? Mark for Review
(1) Points

no rows (*)

all the rows in the table

a null value

an error

Incorrect. Refer to Section 6

75. Which best describes a single-row subquery? Mark for Review
(1) Points

a query that returns only one row from the inner SELECT statement (*)

a query that returns one or more rows from the inner SELECT statement

a query that returns only one column value from the inner SELECT statement

a query that returns one or more column values from the inner SELECT statement

Incorrect. Refer to Section 6

76. Which best describes a multiple-row subquery? Mark for Review
(1) Points

A query that returns only one row from the inner SELECT statement

A query that returns one or more rows from the inner SELECT statement (*)

A query that returns only one column value from the inner SELECT statement

A query that returns one or more column values from the inner SELECT statement

Incorrect. Refer to Section 6

77. Which of the following statements contains a comparison operator that is used to restrict rows based on a list of values returned from an inner query? Mark for Review
(1) Points

```
   SELECT description
FROM d_types
WHERE code IN (SELECT type_code FROM d_songs);
```

```
   SELECT description
FROM d_types
WHERE code = ANY (SELECT type_code FROM d_songs);
```

```
   SELECT description
FROM d_types
WHERE code <> ALL (SELECT type_code FROM d_songs);
```

All of the above. (*)

Incorrect. Refer to Section 6

78. Evaluate this SELECT statement:

```
SELECT customer_id, name
FROM customer
WHERE customer_id IN
  (SELECT customer_id
   FROM customer
   WHERE state_id = 'GA' AND credit_limit > 500.00);
```

What would happen if the inner query returned null?
Mark for Review
(1) Points

An error would be returned.

No rows would be returned by the outer query. (*)

All the rows in the table would be selected.

Only the rows with CUSTOMER_ID values equal to null would be selected.

Incorrect. Refer to Section 6

79. You need to create a SELECT statement that contains a multiple-row subquery, which comparison operator(s) can you use? Mark for Review
(1) Points

IN, ANY, and ALL (*)

LIKE

BETWEEN...AND...

=, <, and >

Incorrect. Refer to Section 6

80. Which of the following best describes the meaning of the ANY operator? Mark for Review
(1) Points

Equal to any member in the list

Compare value to each value returned by the subquery (*)

Compare value to every value returned by the subquery

Equal to each value in the list

Correct

81. Which operator or keyword cannot be used with a multiple-row subquery? Mark for Review
(1) Points

ALL

ANY

= (*)

>

Incorrect. Refer

82. What would happen if you attempted to use a single-row operator with a multiple-row subquery? Mark for Review
(1) Points

An error would be returned. (*)

No rows will be selected.

All the rows will be selected.

The data returned may or may not be correct.

Incorrect. Refer to Section 6

83. Evaluate this SQL statement:

```
SELECT employee_id, last_name, salary
FROM employees
WHERE department_id IN
  (SELECT department_id
   FROM employees
   WHERE salary > 30000 AND salary < 50000);
```

Which values will be displayed?
Mark for Review
(1) Points

Only employees who earn more than $30,000.

Only employees who earn less than $50,000.

All employees who work in a department with employees who earn more than $30,000 and more than $50,000.

All employees who work in a department with employees who earn more than $30,000, but less than $50,000. (*)

Correct

84. Examine the data in the PAYMENT table:

```
PAYMENT_ID  CUSTOMER_ID  PAYMENT_DATE  PAYMENT_TYPE
PAYMENT_AMOUNT
86590586  8908090  10-JUN-03  BASIC  859.00
89453485  8549038  15-FEB-03  INTEREST  596.00
85490345  5489304  20-MAR-03  BASIC  568.00
```

This statement fails when executed:

```
SELECT customer_id, payment_type
FROM payment
WHERE payment_id =
  (SELECT payment_id
   FROM payment
   WHERE payment_amount = 596.00 OR payment_date = '20-MAR-2003');
```

Which change could correct the problem?
Mark for Review
(1) Points

Change the outer query WHERE clause to 'WHERE payment_id IN'. (*)

Remove the quotes surrounding the date value in the OR clause.

Remove the parentheses surrounding the nested SELECT statement.

Change the comparison operator to a single-row operator.

Incorrect. Refer to Section 6

85. What is wrong with the following query?

```
SELECT employee_id, last_name
FROM employees
WHERE salary =
  (SELECT MIN(salary) FROM employees GROUP BY department_id);
```

Mark for Review
(1) Points

Single rows contain multiple values and a logical operator is used.

Subquery returns more than one row and single row comparison operator is used. (*)

Subquery references the wrong table in the WHERE clause.

Nothing, it will run without problems.

Incorrect. Refer to Section 6

86. Examine the data in the PAYMENT table:

```
PAYMENT_ID  CUSTOMER_ID  PAYMENT_DATE  PAYMENT_TYPE
PAYMENT_AMOUNT
86590586  8908090  10-JUN-03  BASIC  859.00
89453485  8549038  15-FEB-03  INTEREST  596.00
85490345  5489304  20-MAR-03  BASIC  568.00
```

This statement fails when executed:

```
SELECT payment_date, customer_id, payment_amount
FROM payment
WHERE payment_id =
  (SELECT payment_id
   FROM payment
   WHERE payment_date >= '05-JAN-2002' OR payment_amount > 500.00);
```

Which change could correct the problem?

Mark for Review
(1) Points

Remove the subquery WHERE clause.

Change the outer query WHERE clause to 'WHERE payment_id IN'. (*)

Include the PAYMENT_ID column in the select list of the outer query.

Remove the single quotes around the date value in the inner query WHERE clause.

Incorrect. Refer to Section 6

87. Assume all the column names are correct. The following SQL statement will execute which of the following?
INSERT INTO departments (department_id, department_name, manager_id, location_id)
VALUES (70, 'Public Relations', 100, 1700);

Mark for Review
(1) Points

100 will be inserted into the department_id column

1700 will be inserted into the manager_id column

70 will be inserted into the department_id column (*)

'Public Relations' will be inserted into the manager_name column

Incorrect. Refer to Section 7

88. You need to add a row to an existing table. Which DML statement should you use? Mark for Review
(1) Points

UPDATE

INSERT (*)

DELETE

CREATE

Incorrect. Refer

89. The PRODUCTS table contains these columns:

PRODUCT_ID NUMBER NOT NULL
PRODUCT_NAME VARCHAR2 (25)
SUPPLIER_ID NUMBER NOT NULL
LIST_PRICE NUMBER (7,2)
COST NUMBER (5,2)
QTY_IN_STOCK NUMBER(4)
LAST_ORDER_DT DATE NOT NULL DEFAULT SYSDATE

Which INSERT statement will execute successfully?
Mark for Review
(1) Points

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, 700); (*)

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, SYSDATE);

INSERT INTO products(product_id, product_name) VALUES (2958, 'Cable');

INSERT INTO products(product_id, product_name, supplier_id VALUES (2958, 'Cable', 8690, SYSDATE);

Incorrect. Refer to Section 7

90. You need to copy rows from the EMPLOYEE table to the EMPLOYEE_HIST table. What could you use in the INSERT statement to accomplish this task? Mark for Review
(1) Points

an ON clause

a SET clause

a subquery (*)

a function

Correct

91. One of the sales representatives, Janet Roper, has informed you that she was recently married, and she has requested that you update her name in the employee database. Her new last name is Cooper. Janet is the only person with the last name of Roper that is employed by the company. The EMPLOYEES table contains these columns and all data is stored in lowercase:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)

DEPT VARCHAR2 (20)
HIRE_DATE DATE
SALARY NUMBER(10)

Which UPDATE statement will accomplish your objective?
Mark for Review
(1) Points

UPDATE employees
SET lname = 'cooper'
WHERE lname = 'roper';
(*)

UPDATE employees lname = 'cooper'
WHERE lname = 'roper';

UPDATE employees
SET lname = 'roper'
WHERE lname = 'cooper';

UPDATE employees
SET cooper = 'lname'
WHERE lname = 'roper';

Incorrect. Refer to Section 7

92. You need to remove a row from the EMPLOYEE table. Which statement would you use? Mark for Review
(1) Points

UPDATE with a WHERE clause

INSERT with a WHERE clause

DELETE with a WHERE clause (*)

MERGE with a WHERE clause

Correct

93. Examine the structures of the PLAYERS, MANAGERS, and TEAMS tables:
PLAYERS
PLAYER_ID NUMBER Primary Key
LAST_NAME VARCHAR2 (30)

FIRST_NAME VARCHAR2 (25)
TEAM_ID NUMBER
MGR_ID NUMBER
SIGNING_BONUS NUMBER(9,2)
SALARY NUMBER(9,2)

MANAGERS
MANAGER_ID NUMBER Primary Key
LAST_NAME VARCHAR2 (20)
FIRST_NAME VARCHAR2 (20)
TEAM_ID NUMBER

TEAMS
TEAM_ID NUMBER Primary Key
TEAM_NAME VARCHAR2 (20)
OWNER_LAST_NAME VARCHAR2 (20)
OWNER_FIRST_NAME VARCHAR2 (20)

Which situation would require a subquery to return the desired result?
Mark for Review
(1) Points

To display the names each player on the Lions team

To display the maximum and minimum player salary for each team

To display the names of the managers for all the teams owned by a given owner (*)

To display each player, their manager, and their team name for all teams with a id value greater than 5000

Correct

94. The EMPLOYEES table contains the following columns:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2(20)
HIRE_DATE DATE
SALARY NUMBER(9,2)
BONUS NUMBER(9,2)

You want to execute one DML statement to change the salary of all employees in department 10 to equal the new salary of employee number 89898. Currently, all employees in department 10 have the same salary value. Which statement should you execute?
Mark for Review
(1) Points

UPDATE employee
SET salary = SELECT salary
FROM employee
WHERE emp_id = 89898;

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898);

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898)
WHERE dept = 10;
(*)

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898 AND dept = 10);

Incorrect. Refer to Section 7

95. Evaluate this statement: DELETE FROM customer; Which statement is true?
Mark for Review
(1) Points

The statement deletes all the rows from the CUSTOMER table. (*)

The statement deletes the CUSTOMER column.

The statement deletes the first row in the CUSTOMERS table.

The statement removes the structure of the CUSTOMER table from the database.

Incorrect. Refer to Section 7

96. When the WHERE clause is missing in a DELETE statement, what is the result?
Mark for Review
(1) Points

All rows are deleted from the table. (*)

The table is removed from the database.

An error message is displayed indicating incorrect syntax.

Nothing. The statement will not execute.

Correct

97. The PLAYERS table contains these columns:
PLAYER_ID NUMBER NOT NULL
PLAYER_LNAME VARCHAR2(20) NOT NULL
PLAYER_FNAME VARCHAR2(10) NOT NULL
TEAM_ID NUMBER
SALARY NUMBER(9,2)

You need to increase the salary of each player for all players on the Tiger team by 12.5 percent. The TEAM_ID value for the Tiger team is 5960. Which statement should you use?
Mark for Review
(1) Points

UPDATE players (salary) SET salary = salary * 1.125;

UPDATE players SET salary = salary * .125 WHERE team_id = 5960;

UPDATE players SET salary = salary * 1.125 WHERE team_id = 5960; (*)

UPDATE players (salary) VALUES(salary * 1.125) WHERE team_id = 5960;

Correct

98. You need to delete a record in the EMPLOYEES table for Tim Jones, whose unique employee identification number is 348. The EMPLOYEES table contains these columns:
ID_NUM NUMBER(5) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
ADDRESS VARCHAR2(30)
PHONE NUMBER(10)

Which DELETE statement will delete the appropriate record without deleting any additional records?
Mark for Review
(1) Points

DELETE FROM employees WHERE id_num = 348; (*)

DELETE FROM employees WHERE lname = jones;

DELETE * FROM employees WHERE id_num = 348;

DELETE 'jones' FROM employees;

Correct

99. You need to update the expiration date of products manufactured before June 30th . In which clause of the UPDATE statement will you specify this condition? Mark for Review
(1) Points

the ON clause

the WHERE clause (*)

the SET clause

the USING clause

Correct

100. You need to update both the DEPARTMENT_ID and LOCATION_ID columns in the EMPLOYEE table using one UPDATE statement. Which clause should you include in the UPDATE statement to update multiple columns? Mark for Review
(1) Points

the USING clause

the ON clause

the WHERE clause

the SET clause (*)

Correct

1. You need to display each employee's name in all uppercase letters. Which function should you use? Mark for Review
(1) Points

CASE

UCASE

UPPER (*)

TOUPPER

2. You need to return a portion of each employee's last name, beginning with the first character up to the fifth character. Which character function should you use?

Mark for Review
(1) Points

INSTR

TRUNC

SUBSTR (*)

CONCAT

3. Evaluate this SELECT statement:

SELECT LENGTH(email)
FROM employee;

What will this SELECT statement display?
Mark for Review
(1) Points

The longest e-mail address in the EMPLOYEE table.

The email address of each employee in the EMPLOYEE table.

The number of characters for each value in the EMAIL column in the employees table. (*)

The maximum number of characters allowed in the EMAIL column.

4. You need to display the number of characters in each customer's last name. Which function should you use? Mark for Review
(1) Points

LENGTH (*)

LPAD

COUNT

SUBSTR

5. Which functions can be used to manipulate character, number, and date column values? Mark for Review
(1) Points

CONCAT, RPAD, and TRIM (*)

UPPER, LOWER, and INITCAP

ROUND, TRUNC, and MOD

ROUND, TRUNC, and ADD_MONTH

6. You query the database with this SQL statement:

```
SELECT LOWER(SUBSTR(CONCAT(last_name, first_name)), 1, 5) "ID"
FROM employee;
```

In which order are the functions evaluated?
Mark for Review
(1) Points

LOWER, SUBSTR, CONCAT

LOWER, CONCAT, SUBSTR

SUBSTR, CONCAT, LOWER

CONCAT, SUBSTR, LOWER (*)

7. Which three statements about functions are true? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

The SYSDATE function returns the Oracle Server date and time. (*)

The ROUND number function rounds a value to a specified decimal place or the nearest whole number. (*)

The CONCAT function can only be used on character strings, not on numbers.

Which comparison operator retrieves a list of values? Mark for Review

(1) Points

IN (*)

LIKE

BETWEEN...IN...

IS NULL

The SUBSTR character function returns a portion of a string beginning at a defined character position to a specified length. (*)

10. Which two functions can be used to manipulate number or date column values, but NOT character column values? (Choose two.) Mark for Review

(1) Points

(Choose all correct answers)

RPAD

TRUNC (*)

ROUND (*)

INSTR

CONCAT

11. Evaluate this SELECT statement:

```
SELECT SYSDATE + 30
FROM dual;
```

Which value is returned by the query?

Mark for Review

(1) Points

the current date plus 30 hours

the current date plus 30 days (*)

the current date plus 30 months

No value is returned because the SELECT statement generates an error.

12. You need to display the current year as a character value (for example: Two Thousand and One). Which element would you use? Mark for Review
(1) Points

RR

YY

YYYY

YEAR (*)

13. You need to display the number of months between today's date and each employee's hiredate. Which function should you use? Mark for Review
(1) Points

ROUND

BETWEEN

ADD_MONTHS

MONTHS_BETWEEN (*)

14. Which of the following SQL statements will correctly display the last name and the number of weeks employed for all employees in department 90?
Mark for Review
(1) Points

SELECT last_name, (SYSDATE-hire_date)/7 AS WEEKS

FROM employees
WHERE department_id = 90;

(*)

SELECT last name, (SYSDATE-hire_date)/7 DISPLAY WEEKS
FROM employees
WHERE department id = 90;

SELECT last_name, # of WEEKS
FROM employees
WHERE department_id = 90;

SELECT last_name, (SYSDATE-hire_date)AS WEEK
FROM employees
WHERE department_id = 90;

16. Which statement concerning single row functions is true? Mark for Review
(1) Points

Single row functions can accept only one argument, but can return multiple values.

Single row functions cannot modify a data type.

Single row functions can be nested. (*)

Single row functions return one or more results per row.

17. Which two statements concerning SQL functions are true? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

Character functions can accept numeric input.

Not all date functions return date values. (*)

Number functions can return number or character values.

Conversion functions convert a value from one data type to another data type. (*)

Single-row functions manipulate groups of rows to return one result per group of rows.

18. Which three statements concerning explicit data type conversions are true? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

Use the TO_NUMBER function to convert a number to a character string.

Use the TO_DATE function to convert a character string to a date value. (*)

Use the TO_NUMBER function to convert a character string of digits to a number. (*)

Use the TO_DATE function to convert a date value to character string or number.

Use the TO_CHAR function to convert a number or date value to character string. (*)

19. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
HIRE_DATE DATE

You need to display HIRE_DATE values in this format:

January 28, 2000

Which SELECT statement could you use?
Mark for Review
(1) Points

SELECT TO_CHAR(hire_date, Month DD, YYYY)
FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD, YYYY')
FROM employees;

(*)

SELECT hire_date(TO_CHAR 'Month DD', ' YYYY')
FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD', ' YYYY')
FROM employees;

20. Which arithmetic operation will return a numeric value? Mark for Review (1) Points

TO_DATE('01-JUN-2004') - TO_DATE('01-OCT-2004') (*)

NEXT_DAY(hire_date) + 5

SYSDATE - 6

SYSDATE + 30 / 24

21. If you use the RR format when writing a query using the date 27-OCT-17 and the year is 2001, what year would be the result? Mark for Review (1) Points

2001

1901

2017 (*)

1917

Incorrect Incorrect. Refer to Section 2

22. The PRODUCT table contains this column: PRICE NUMBER(7,2)
Evaluate this statement:

```
SELECT NVL(10 / price, '0')
FROM PRODUCT;
```

What would happen if the PRICE column contains null values?
Mark for Review
(1) Points

The statement would fail because values cannot be divided by 0.

A value of 0 would be displayed. (*)

A value of 10 would be displayed.

The statement would fail because values cannot be divided by null.

23. Which of the following General Functions will return the first non-null expression in the expression list? Mark for Review
(1) Points

NVL

NVL2

NULLIF

COALESCE (*)

24. You need to replace null values in the DEPT_ID column with the text "N/A". Which functions should you use? Mark for Review
(1) Points

TO_CHAR and NVL (*)

TO_CHAR and NULL

TO_CHAR and NULLIF

25. What happens when you create a Cartesian product? Mark for Review
(1) Points

All rows from one table are joined to all rows of another table (*)

The table is joined to itself, one column to the next column, exhausting all possibilities

The table is joined to another equal table

All rows that do not match in the WHERE clause are displayed

Incorrect Incorrect. Refer to Section 3

26. The PATIENTS and DOCTORS tables contain these columns:

PATIENTS
PATIENT_ID NUMBER(9)
LAST_NAME VARCHAR2 (20)
FIRST_NAME VARCHAR2 (20)

DOCTORS
DOCTOR_ID NUMBER(9)
LAST_NAME VARCHAR2 (20)
FIRST_NAME VARCHAR2 (20)

You issue this statement:

```
SELECT patient_id, doctor_id
FROM patients, doctors;
```

Which result will this statement provide?
Mark for Review
(1) Points

A report containing all possible combinations of the PATIENT_ID and DOCTOR_ID values (*)

A report containing each patient's id value and their doctor's id value

A report with NO duplicate PATIENT_ID or DOCTOR_ID values

A syntax error

27. When joining 3 tables in a SELECT statement, how many join conditions are needed in the WHERE clause? Mark for Review
(1) Points

0

1

2 (*)

3

Incorrect Incorrect. Refer to Section 3

28. You need to provide a list of the first and last names of all employees who work in the Sales department who earned a bonus and had sales over $50,000. The company president would like the sales listed starting with the highest amount first. The EMPLOYEES table and the SALES_DEPT table contain the following columns:

EMPLOYEES
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2(20)
HIRE_DATE DATE
SALARY NUMBER(10)

SALES_DEPT
SALES_ID NUMBER(10) PRIMARY KEY
SALES NUMBER(20)
QUOTA NUMBER(20)
MGR VARCHAR2(30)
BONUS NUMBER(10)
EMP_ID NUMBER(10) FOREIGN KEY

Which SELECT statement will accomplish this task?
Mark for Review

(1) Points

SELECT e.emp_id, e.lname, e.fname, s.emp_id, s.bonus, s.sales
FROM employees e, sales_dept s
ORDER BY sales DESC
WHERE e.emp_id = s.emp_id AND sales > 50000 AND s.bonus IS NOT NULL;

SELECT e.emp_id, e.lname, e.fname, s.emp_id, s.bonus, s. sales
ORDER BY sales DESC
FROM employees e, sales_dept s
WHERE e.emp_id = s.emp_id AND s.bonus IS NOT NULL AND sales > 50000;

SELECT e.emp_id, e.lname, e.fname, s.emp_id, s.bonus, s. sales
WHERE e.emp_id = s.emp_id
FROM employees e, sales_dept s AND s.bonus IS NOT NULL AND sales > 50000
ORDER BY sales DESC;

SELECT e.emp_id, e.lname, e.fname, s.emp_id, s.bonus, s. sales
FROM employees e, sales_dept s
WHERE e.emp_id = s.emp_id AND s.bonus IS NOT NULL AND sales > 50000
ORDER BY sales DESC;

(*)
29. You need to create a report that lists all employees in the Sales department who do not earn $25,000 per year. Which query should you issue to accomplish this task? Mark for Review
(1) Points

SELECT last_name, first_name, salary
FROM employees
WHERE salary > 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary = 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees

WHERE salary <= 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary != 25000 AND dept_id = 10;

(*)

30. The CUSTOMERS and SALES tables contain these columns:

CUSTOMERS
CUST_ID NUMBER(10) PRIMARY KEY
COMPANY VARCHAR2(30)
LOCATION VARCHAR2(20)

SALES
SALES_ID NUMBER(5) PRIMARY KEY
CUST_ID NUMBER(10) FOREIGN KEY
TOTAL_SALES NUMBER(30)

Which SELECT statement will return the customer ID, the company and the total sales?

Mark for Review
(1) Points

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id (+);

SELECT cust_id, company, total_sales
FROM customers, sales
WHERE cust_id = cust_id;

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;

(*)

SELECT cust_id, company, total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;

31. The EMPLOYEE_ID column in the EMPLOYEE table corresponds to the EMPLOYEE_ID column of the ORDER table. The EMPLOYEE_ID column in the ORDER table contains null values for rows that you need to display.
Which type of join should you use to display the data? Mark for Review
(1) Points

natural join

self-join

outer join (*)

equijoin

32. Which statement about outer joins is true? Mark for Review
(1) Points

The tables must be aliased.

The FULL, RIGHT, or LEFT keyword must be included.

The OR operator cannot be used to link outer join conditions. (*)

Outer joins are always evaluated before other types of joins in the query.

33. Which of the following best describes the function of an outer join? Mark for Review
(1) Points

An outer join will return only those rows that do not meet the join criteria.

An outer join will return only data from the far left column in one table and the far right column in the other table.

An outer join will return data only if both tables contain an identical pair of columns.

An outer join will return all rows that meet the join criteria and will return NULL values from one table if no rows from the other table satisfy the join criteria. (*)

34. Which of the following conditions will cause an error on a NATURAL JOIN? Mark for Review
(1) Points

When you attempt to write it as an equijoin.

When the NATURAL JOIN clause is based on all columns in the two tables that have the same name.

If it selects rows from the two tables that have equal values in all matched columns.

If the columns having the same names have different data types, then an error is returned. (*)

35. A join between tables where the result set includes matching values from both tables but does NOT return any unmatched rows could be called which of the following? (Choose three) Mark for Review
(1) Points

(Choose all correct answers)

Equijoin (*)

Self join (*)

Nonequijoin

Simple join (*)

full outer join

36. You need to join two tables that have two columns with the same name and compatible data types. Which type of join would you create to join the tables on both of the columns? Mark for Review
(1) Points

Natural join (*)

Cross join

Outer join

Self-join

37. Which of the following statements is the simplest description of a nonequijoin? Mark for Review
(1) Points

A join condition containing something other than an equality operator (*)

A join condition that is not equal to other joins.

A join condition that includes the (+) on the left hand side.

A join that joins a table to itself

38. Evaluate this SELECT statement:

```
SELECT a.lname || ', ' || a.fname as "Patient", b.lname || ', ' || b.fname as "Physician",
c.admission
FROM patient a
JOIN physician b
ON (b.physician_id = c.physician_id);
JOIN admission c
ON (a.patient_id = c.patient_id);
```

Which clause generates an error?
Mark for Review
(1) Points

JOIN physician b

ON (b.physician_id = c.physician_id); (*)

JOIN admission c

ON (a.patient_id = c.patient_id)

39. The primary advantage of using JOIN ON is: Mark for Review

(1) Points

The join happens automatically based on matching column names and data types

It will display rows that do not meet the join condition

It permits columns with different names to be joined (*)

It permits columns that don't have matching data types to be joined

40. For which condition would you use an equijoin query with the USING keyword? Mark for Review
(1) Points

You need to perform a join of the CUSTOMER and ORDER tables but limit the number of columns in the join condition. (*)

The ORDER table contains a column that has a referential constraint to a column in the PRODUCT table.

The CUSTOMER and ORDER tables have no columns with identical names.

The CUSTOMER and ORDER tables have a corresponding column, CUST_ID. The CUST_ID column in the ORDER table contains null values that need to be displayed.

41. Which query will retrieve all the rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table? Mark for Review
(1) Points

```
SELECT e.last_name, e.department_id, d.department_name
FROM employees e
RIGHT OUTER JOIN departments d ON (e.department_id = d.department_id);
```

```
SELECT e.last_name, e.department_id, d.department_name
FROM employees e
NATURAL JOIN departments d;
```

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
LEFT OUTER JOIN departments d ON (e.department_id = d.department_id);

(*)

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
JOIN departments d USING (e.department_id = d.department_id);

42. Which type of join returns rows from one table that have NO direct match in the other table? Mark for Review
(1) Points

equijoin

self join

outer join (*)

natural join

43. What should be included in a SELECT statement to return NULL values from all tables? Mark for Review
(1) Points

natural joins

left outer joins

full outer joins (*)

right outer joins

44. If a select list contains both a column as well as a group function then what clause is required? Mark for Review
(1) Points

having clause

join clause

order by clause

group by clause (*)

45. Evaluate this SELECT statement:

```
SELECT MIN(hire_date), dept_id
FROM employee
GROUP BY dept_id;
```

Which values are displayed?
Mark for Review
(1) Points

The earliest hire date in each department. (*)

The the earliest hire date in the EMPLOYEE table.

The latest hire date in the EMPLOYEE table.

The hire dates in the EMPLOYEE table that contain NULL values

46. Which statement about group functions is true? Mark for Review
(1) Points

Group functions ignore null values. (*)

Group functions can only be used in a SELECT list.

Group functions can be used in a WHERE clause.

A query that includes a group function in the SELECT list must include a GROUP BY clause.

47. Group functions can be nested to a depth of? Mark for Review
(1) Points

three

four

two (*)

Group functions cannot be nested.

48. Which group function would you use to display the total of all salary values in the EMPLOYEE table? Mark for Review
(1) Points

SUM (*)

AVG

COUNT

MAX

49. The VENDORS table contains these columns:

VENDOR_ID NUMBER Primary Key
NAME VARCHAR2(30)
LOCATION_ID NUMBER
ORDER_DT DATE
ORDER_AMOUNT NUMBER(8,2)

Which two clauses represent valid uses of aggregate functions for this table?
Mark for Review
(1) Points

(Choose all correct answers)

FROM MAX(order_dt)

SELECT SUM(order_dt)

SELECT SUM(order_amount) (*)

WHERE MAX(order_dt) = order_dt

SELECT location_id, MIN(AVG(order_amount)) (*)

Incorrect Incorrect. Refer to Section 5

50. You need to calculate the standard deviation for the cost of products produced in the Birmingham facility. Which group function will you use? Mark for Review
(1) Points

STDEV

STDDEV (*)

VAR_SAMP

VARIANCE

51. Group functions return a value for _____ and _____ null values in their computations. Mark for Review
(1) Points

a row set, ignore (*)

each row, ignore

a row set, include

each row, include

52. You need to calculate the average salary of employees in each department. Which group function will you use? Mark for Review
(1) Points

AVG (*)

MEAN

MEDIAN

AVERAGE

53. The AVG, SUM, VARIANCE, and STDDEV functions can be used with which of the following? Mark for Review
(1) Points

Only numeric data types (*)

Integers only

Any data type

All except numeric

54. The PRODUCTS table contains these columns:

PROD_ID NUMBER(4)
PROD_NAME VARCHAR2(30)
PROD_CAT VARCHAR2(30)
PROD_PRICE NUMBER(3)
PROD_QTY NUMBER(4)

The following statement is issued:

```
SELECT AVG(prod_price, prod_qty)
FROM products;
```

What happens when this statement is issued?
Mark for Review
(1) Points

Both the average price and the average quantity of the products are returned.

Only the average quantity of the products is returned.

The values in the PROD_PRICE column and the PROD_QTY column are averaged together.

An error occurs. (*)

55. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(20)
FIRST_NAME VARCHAR2(20)
SALARY NUMBER(9,2)
HIRE_DATE DATE
BONUS NUMBER(7,2)
COMM_PCT NUMBER(4,2)

Which three functions could be used with the HIRE_DATE, LAST_NAME, or SALARY columns? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

MAX (*)

SUM

AVG

MIN (*)

COUNT (*)

56. Which SELECT statement will calculate the number of rows in the PRODUCTS table? Mark for Review
(1) Points

SELECT COUNT(products);

SELECT COUNT FROM products;

SELECT COUNT (*) FROM products; (*)

SELECT ROWCOUNT FROM products

57. Examine the data from the LINE_ITEM table:

LINE_ITEM_ID	ORDER_ID	PRODUCT_ID	PRICE	DISCOUNT
890898	847589	848399	8.99	0.10
768385	862459	849869	5.60	0.05
867950	985490	945809	5.60	
954039	439203	438925	5.25	0.15
543949	349302	453235	4.50	

You query the LINE_ITEM table and a value of 5 is returned. Which SQL statement did you execute?

Mark for Review

(1) Points

SELECT COUNT(discount) FROM line_item;

SELECT COUNT(*) FROM line_item; (*)

SELECT SUM(discount) FROM line_item;

SELECT AVG(discount) FROM line_it

58. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(20)
FIRST_NAME VARCHAR2(20)
SALARY NUMBER(7,2)
DEPARTMENT_ID NUMBER(9)

You need to display the number of employees whose salary is greater than $50,000? Which SELECT would you use?

Mark for Review

(1) Points

SELECT * FROM employees
WHERE salary > 50000;

SELECT * FROM employees
WHERE salary < 50000;

SELECT COUNT(*) FROM employees
WHERE salary < 50000;

SELECT COUNT(*) FROM employees
WHERE salary > 50000;

(*)

SELECT COUNT(*) FROM employees
WHERE salary > 50000
GROUP BY employee_id, last_name, first_name, salary, department_id;

59. Evaluate this SELECT statement:

SELECT COUNT(*)
FROM products;

Which statement is true?
Mark for Review
(1) Points

The number of rows in the table is displayed. (*)

The number of unique PRODUCT_IDs in the table is displayed.

An error occurs due to an error in the SELECT clause.

An error occurs because no WHERE clause is included in the SELECT statement.

60. Evaluate this statement:

```
SELECT department_id, AVG(salary)
FROM employees
WHERE job_id <> 69879
GROUP BY job_id, department_id
HAVING AVG(salary) > 35000
ORDER BY department_id;
```

Which clauses restricts the result? Choose two.
Mark for Review
(1) Points

(Choose all correct answers)

SELECT department_id, AVG(salary)

WHERE job_id <> 69879 (*)

GROUP BY job_id, department_id

HAVING AVG(salary) > 35000 (*)

61. The PLAYERS and TEAMS tables contain these columns:

```
PLAYERS
PLAYER_ID NUMBER NOT NULL, Primary Key
LAST_NAME VARCHAR2 (30) NOT NULL
FIRST_NAME VARCHAR2 (25) NOT NULL
TEAM_ID NUMBER
POSITION VARCHAR2 (25)

TEAMS
TEAM_ID NUMBER NOT NULL, Primary Key
TEAM_NAME VARCHAR2 (25)
```

You need to create a report that lists the names of each team with more than five pitchers.
Which SELECT statement will produce the desired result?
Mark for Review
(1) Points

SELECT t.team_name, COUNT(p.player_id)

```
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name;
```

SELECT t.team_name, COUNT(p.player_id)
FROM players JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER' HAVING COUNT(p.player_id) > 5;

SELECT t.team_name, COUNT(p.player_id)
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;

SELECT t.team_name, COUNT(p.player_id)
FROM players p JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;

(*)

62. The MANUFACTURER table contains these columns:

MANUFACTURER_ID NUMBER
MANUFACTURER_NAME VARCHAR2(30)
TYPE VARCHAR2(25)
LOCATION_ID NUMBER

You need to display the number of unique types of manufacturers at each location.
Which SELECT statement should you use?

Mark for Review
(1) Points

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY location_id;

(*)

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer;

SELECT location_id, COUNT(type)
FROM manufacturer
GROUP BY location_id;

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY type;

3. The PLAYERS table contains these columns:

PLAYER_ID NUMBER PK
PLAYER_NAME VARCHAR2 (30)
TEAM_ID NUMBER
HIRE_DATE DATE
SALARY NUMBER (8,2)

Which two clauses represent valid uses of aggregate functions? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

ORDER BY AVG(salary)

GROUP BY MAX(salary) (*)

SELECT AVG(NVL(salary, 0)) (*)

HAVING MAX(salary) > 10000 (*)

WHERE hire_date > AVG(hire_date)

65. Which statement about the GROUP BY clause is true? Mark for Review
(1) Points

To exclude rows before dividing them into groups using the GROUP BY clause, you use should a WHERE clause. (*)

You can use a column alias in a GROUP BY clause.

By default, rows are not sorted when a GROUP BY clause is used.

You must use the HAVING clause with the GROUP BY clause.

66. Evaluate this SELECT statement:

```
SELECT SUM(salary), dept_id
FROM employee
GROUP BY dept_id;
```

How are the results of this statement sorted?
Mark for Review
(1) Points

Ascending order by dept_id (*)

Descending order by dept_id

Ascending order by cumulative salary

Descending order by cumulative salary

67. The EMPLOYEES table contains these columns:

```
ID_NUMBER NUMBER Primary Key
NAME VARCHAR2 (30)
DEPARTMENT_ID NUMBER
SALARY NUMBER (7,2)
HIRE_DATE DATE
```

Evaluate this SQL statement:

```
SELECT id_number, name, department_id, SUM(salary)
FROM employees
WHERE salary > 25000
GROUP BY department_id, id_number, name
ORDER BY hire_date;
```

Why will this statement cause an error?
Mark for Review
(1) Points

The HAVING clause is missing.

The WHERE clause contains a syntax error.

The SALARY column is NOT included in the GROUP BY clause.

The HIRE_DATE column is NOT included in the GROUP BY clause. (*)

Incorrect Incorrect. Refer to Section 6

68. Examine the structures of the CUSTOMER and ORDER_HISTORY tables:

CUSTOMER
CUSTOMER_ID NUMBER(5)
NAME VARCHAR2(25)
CREDIT_LIMIT NUMBER(8,2)
OPEN_DATE DATE

ORDER_HISTORY
ORDER_ID NUMBER(5)
CUSTOMER_ID NUMBER(5)
ORDER_DATE DATE
TOTAL NUMBER(8,2)

Which of the following scenarios would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the date each customer account was opened.

You need to display each date that a customer placed an order.

You need to display all the orders that were placed on a certain date.

You need to display all the orders that were placed on the same day as order number 25950. (*)

Incorrect Incorrect. Refer to Section 6

69. Which operator can be used with a multiple-row subquery? Mark for Review

(1) Points

IN (*)

<>

=

LIKE

70. You need to create a report to display the names of products with a cost value greater than the average cost of all products. Which SELECT statement should you use? Mark for Review
(1) Points

SELECT product_name
FROM products
WHERE cost > (SELECT AVG(cost) FROM product);

(*)

SELECT product_name
FROM products
WHERE cost > AVG(cost);

SELECT AVG(cost), product_name
FROM products
WHERE cost > AVG(cost)
GROUP by product_name;

SELECT product_name
FROM (SELECT AVG(cost) FROM product)
WHERE cost > AVG(cost);

71. Using a subquery in which clause will return a syntax error? Mark for Review
(1) Points

WHERE

FROM

HAVING

There are no places you cannot place subqueries. (*)

72. You need to display all the players whose salaries are greater than or equal to John Brown's salary. Which comparison operator should you use? Mark for Review (1) Points

=

>

<=

>= (*)

73. Which best describes a single-row subquery? Mark for Review (1) Points

a query that returns only one row from the inner SELECT statement (*)

a query that returns one or more rows from the inner SELECT statement

a query that returns only one column value from the inner SELECT statement

a query that returns one or more column values from the inner SELECT statement

74. Examine the structure of the EMPLOYEE, DEPARTMENT, and ORDERS tables.

EMPLOYEE
EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(25)
FIRST_NAME VARCHAR2(25)

DEPARTMENT_ID NUMBER(9)

DEPARTMENT
DEPARTMENT_ID NUMBER(9)
DEPARTMENT_NAME VARCHAR2(25)
CREATION_DATE DATE

ORDERS
ORDER_ID NUMBER(9)
EMPLOYEE_ID NUMBER(9)
DATE DATE
CUSTOMER_ID NUMBER(9)

You want to display all employees who had an order after the Sales department was established. Which of the following constructs would you use?
Mark for Review
(1) Points

a group function

a single-row subquery (*)

the HAVING clause

a MERGE statement

75. Which statement about the <> operator is true? Mark for Review
(1) Points

The <> operator is NOT a valid SQL operator.

The <> operator CANNOT be used in a single-row subquery.

The <> operator returns the same result as the ANY operator in a subquery.

The <> operator can be used when a single-row subquery returns only one row. (*)

76. Which operator or keyword cannot be used with a multiple-row subquery?
Mark for Review
(1) Points

ALL

ANY

= (*)

>

77. Which comparison operator would you use to compare a value to every value returned by a subquery? Mark for Review
(1) Points

SOME

ANY

ALL (*)

IN
Correct Correct

78. Evaluate this SELECT statement:

```
SELECT player_id, name
FROM players
WHERE team_id IN
  (SELECT team_id
  &nbspFROM teams
  &nbspWHERE team_id > 300 AND salary_cap > 400000);
```

What would happen if the inner query returned a NULL value?
Mark for Review
(1) Points

No rows would be returned by the outer query. (*)

A syntax error in the outer query would be returned.

A syntax error in the inner query would be returned.

All the rows in the PLAYER table would be returned by the outer query.

79. What would happen if you attempted to use a single-row operator with a multiple-row subquery? Mark for Review
(1) Points

An error would be returned. (*)

No rows will be selected.

All the rows will be selected.

The data returned may or may not be correct.

Incorrect Incorrect. Refer to Section 6

80. Which best describes a multiple-row subquery? Mark for Review
(1) Points

A query that returns only one row from the inner SELECT statement

A query that returns one or more rows from the inner SELECT statement (*)

A query that returns only one column value from the inner SELECT statement

A query that returns one or more

81. Examine the structures of the PARTS and MANUFACTURERS tables:

PARTS:
PARTS_ID VARCHAR2(25)
PK PARTS_NAME VARCHAR2(50)
MANUFACTURERS_ID NUMBER
COST NUMBER(5,2)
PRICE NUMBER(5,2)

MANUFACTURERS:
ID NUMBER
PK NAME VARCHAR2(30)
LOCATION VARCHAR2(20)

Which SQL statement correctly uses a subquery?
Mark for Review
(1) Points

UPDATE parts SET price = price * 1.15
WHERE manufacturers_id =
(SELECT id
 FROM manufacturers
 WHERE UPPER(location) IN('ATLANTA ', 'BOSTON ', 'DALLAS '));

SELECT parts_name, price, cost
FROM parts
WHERE manufacturers_id !=
(SELECT id
 FROM manufacturers
 WHERE LOWER(name) = 'cost plus');

SELECT parts_name, price, cost
FROM parts
WHERE manufacturers_id IN
(SELECT id
 FROM manufacturers m
 JOIN part p ON (m.id = p.manufacturers_id));

(*)

SELECT parts_name
FROM
(SELECT AVG(cost)
 FROM manufacturers)
 WHERE cost > AVG(cost);

Correct Correct

82. Which of the following best describes the meaning of the ANY operator? Mark for Review
(1) Points

Equal to any member in the list

Compare value to each value returned by the subquery (*)

Compare value to every value returned by the subquery

Equal to each value in the list

83. Which statement about single-row and multiple-row subqueries is true? Mark for Review
(1) Points

Multiple-row subqueries cannot be used with the LIKE operator. (*)

Single-row operators can be used with both single-row and multiple-row subqueries.

Multiple-row subqueries can be used with both single-row and multiple-row operators.

Multiple-row subqueries can only be used in SEL

84. Which statement about the ANY operator when used with a multiple-row subquery is true? Mark for Review
(1) Points

The ANY operator compares every value returned by the subquery. (*)

The ANY operator can be used with the DISTINCT keyword.

The ANY operator is a synonym for the ALL operator.

The ANY operator can be used with the LIKE and IN operators.

85. You need to create a SELECT statement that contains a multiple-row subquery, which comparison operator(s) can you use? Mark for Review
(1) Points

IN, ANY, and ALL (*)

LIKE

BETWEEN...AND...

=, <, and >

86. You need to display all the products that cost more than the maximum cost of every product produced in Japan. Which multiple-row comparison operator could you use? Mark for Review
(1) Points

>ANY (*)

NOT=ALL

IN

>IN

87. The STUDENTS table contains these columns:

STU_ID NUMBER(9) NOT NULL
LAST_NAME VARCHAR2 (30) NOT NULL
FIRST_NAME VARCHAR2 (25) NOT NULL
DOB DATE
STU_TYPE_ID VARCHAR2(1) NOT NULL
ENROLL_DATE DATE

You create another table, named FT_STUDENTS, with an identical structure.You want to insert all full-time students, who have a STU_TYPE_ID value of "F", into the new table. You execute this INSERT statement:

```
INSERT INTO ft_students
  (SELECT stu_id, last_name, first_name, dob, stu_type_id, enroll_date
  FROM students
  WHERE UPPER(stu_type_id) = 'F');
```

What is the result of executing this INSERT statement?
Mark for Review
(1) Points

All full-time students are inserted into the FT_STUDENTS table. (*)

An error occurs because the FT_STUDENTS table already exists.

An error occurs because you CANNOT use a subquery in an INSERT statement.

An error occurs because the INSERT statement does NOT contain a VALUES clause.

88. The PRODUCTS table contains these columns:

PROD_ID NUMBER(4)
PROD_NAME VARCHAR2(25)
PROD_PRICE NUMBER(3)

You want to add the following row data to the PRODUCTS table:
(1) a NULL value in the PROD_ID column
(2) "6-foot nylon leash" in the PROD_NAME column
(3) "10" in the PROD_PRICE column

You issue this statement:

```
INSERT INTO products
VALUES (null,'6-foot nylon leash', 10);
```

What row data did you add to the table?
Mark for Review
(1) Points

The row was created with the correct data in all three columns. (*)

The row was created with the correct data in two of three columns.

The row was created with the correct data in one of the three columns.

The row was created completely wrong. No data ended up in the correct columns.

89. You have been instructed to add a new customer to the CUSTOMERS table. Because the new customer has not had a credit check, you should not add an amount to the CREDIT column.
The CUSTOMERS table contains these columns:

CUST_ID NUMBER(10)
COMPANY VARCHAR2(30)
CREDIT NUMBER(10)
POC VARCHAR2(30)
LOCATION VARCHAR2(30)

Which two INSERT statements will accomplish your objective?
Mark for Review
(1) Points

(Choose all correct answers)

INSERT INTO customers (cust_id, company, poc, location)
VALUES (200, 'InterCargo', 'tflanders', 'samerica');

(*)

INSERT INTO customers
VALUES (200, 'InterCargo', null, 'tflanders', 'samerica');

(*)

INSERT INTO customers
VALUES (cust_id, company, credit, poc, location) (200, 'InterCargo', 0, 'tflanders', 'samerica');

INSERT INTO customers
VALUES (200, InterCargo, 0, tflanders, samerica);

90. You need to add a row to an existing table. Which DML statement should you use? Mark for Review
(1) Points

UPDATE

INSERT (*)

DELETE

CREATE

91. You need to update both the DEPARTMENT_ID and LOCATION_ID columns in the EMPLOYEE table using one UPDATE statement. Which clause should you include in the UPDATE statement to update multiple columns?
Mark for Review
(1) Points

the USING clause

the ON clause

the WHERE clause

the SET clause (*)

92. What keyword in an UPDATE statement speficies the columns you want to change? Mark for Review
(1) Points

SELECT

WHERE

SET (*)

HAVING

93. One of the sales representatives, Janet Roper, has informed you that she was recently married, and she has requested that you update her name in the employee database. Her new last name is Cooper. Janet is the only person with the last name of Roper that is employed by the company. The EMPLOYEES table contains these columns and all data is stored in lowercase:

EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2 (20)
HIRE_DATE DATE
SALARY NUMBER(10)

Which UPDATE statement will accomplish your objective?
Mark for Review
(1) Points

UPDATE employees
SET lname = 'cooper'
WHERE lname = 'roper';

(*)

UPDATE employees lname = 'cooper'
WHERE lname = 'roper';

UPDATE employees
SET lname = 'roper'
WHERE lname = 'cooper';

UPDATE employees
SET cooper = 'lname'
WHERE lname = 'roper';

94. Which two commands can be used to modify existing data in a database row?
Mark for Review
(1) Points

(Choose all correct answers)

DELETE

INSERT (*)

SELECT

UPDATE (*)

95. You need to delete a record in the EMPLOYEES table for Tim Jones, whose unique employee identification number is 348. The EMPLOYEES table contains these columns:

ID_NUM NUMBER(5) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
ADDRESS VARCHAR2(30)
PHONE NUMBER(10)

Which DELETE statement will delete the appropriate record without deleting any additional records?

Mark for Review
(1) Points

DELETE FROM employees WHERE id_num = 348; (*)

DELETE FROM employees WHERE lname = jones;

DELETE * FROM employees WHERE id_num = 348;

DELETE 'jones' FROM employees;

Incorrect Incorrect. Refer to Section 7

96. The TEACHERS and CLASS_ASSIGNMENTS tables contain these columns:

TEACHERS
TEACHER_ID NUMBER(5)
NAME VARCHAR2(25)
SUBJECT_ID NUMBER(5)
HIRE_DATE DATE
SALARY NUMBER(9,2)

CLASS_ASSIGNMENTS
CLASS_ID NUMBER(5)
TEACHER_ID NUMBER(5)
START_DATE DATE
MAX_CAPACITY NUMBER(3)

Which scenario would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the start date for each class taught by a given teacher.

You need to create a report to display the teachers who were hired more than five years ago.

You need to display the names of the teachers who teach classes that start within the next week.

You need to create a report to display the teachers who teach more classes than the average number of classes taught by each teacher. (*)

Incorrect Incorrect. Refer to Section 7
96. The TEACHERS and CLASS_ASSIGNMENTS tables contain these columns:

TEACHERS
TEACHER_ID NUMBER(5)
NAME VARCHAR2(25)
SUBJECT_ID NUMBER(5)
HIRE_DATE DATE
SALARY NUMBER(9,2)

CLASS_ASSIGNMENTS
CLASS_ID NUMBER(5)
TEACHER_ID NUMBER(5)
START_DATE DATE
MAX_CAPACITY NUMBER(3)

Which scenario would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the start date for each class taught by a given teacher.

You need to create a report to display the teachers who were hired more than five years ago.

You need to display the names of the teachers who teach classes that start within the next week.

You need to create a report to display the teachers who teach more classes than the average number of classes taught by each teacher. (*)

97. Examine the structures of the PRODUCTS and SUPPLIERS tables:

SUPPLIERS
SUPPLIER_ID NUMBER NOT NULL, Primary Key
SUPPLIER_NAME VARCHAR2 (25)
ADDRESS VARCHAR2 (30)
CITY VARCHAR2 (25)
REGION VARCHAR2 (10)
POSTAL_CODE VARCHAR2 (11)

PRODUCTS
PRODUCT_ID NUMBER NOT NULL, Primary Key
PRODUCT_NAME VARCHAR2 (25)
SUPPLIER_ID NUMBER Foreign key to SUPPLIER_ID of the SUPPLIERS table
CATEGORY_ID NUMBER
QTY_PER_UNIT NUMBER
UNIT_PRICE NUMBER (7,2)
QTY_IN_STOCK NUMBER
QTY_ON_ORDER NUMBER
REORDER_LEVEL NUMBER

You want to delete any products supplied by the five suppliers located in Atlanta. Which script should you use?
Mark for Review
(1) Points

DELETE FROM products
WHERE supplier_id IN
(SELECT supplier_id
FROM suppliers
WHERE UPPER(city) = 'ATLANTA');

(*)

DELETE FROM products
WHERE UPPER(city) = 'ATLANTA';

DELETE FROM products

```
WHERE supplier_id =
   (SELECT supplier_id
   FROM suppliers
   WHERE UPPER(city) = 'ATLANTA');
```

```
        DELETE FROM products
WHERE supplier_id IN
   (SELECT supplier_id
   FROM suppliers
   WHERE UPPER(city) = 'ALANTA');
```

97. Examine the structures of the PRODUCTS and SUPPLIERS tables:

SUPPLIERS
SUPPLIER_ID NUMBER NOT NULL, Primary Key
SUPPLIER_NAME VARCHAR2 (25)
ADDRESS VARCHAR2 (30)
CITY VARCHAR2 (25)
REGION VARCHAR2 (10)
POSTAL_CODE VARCHAR2 (11)

PRODUCTS
PRODUCT_ID NUMBER NOT NULL, Primary Key
PRODUCT_NAME VARCHAR2 (25)
SUPPLIER_ID NUMBER Foreign key to SUPPLIER_ID of the SUPPLIERS table
CATEGORY_ID NUMBER
QTY_PER_UNIT NUMBER
UNIT_PRICE NUMBER (7,2)
QTY_IN_STOCK NUMBER
QTY_ON_ORDER NUMBER
REORDER_LEVEL NUMBER

You want to delete any products supplied by the five suppliers located in Atlanta.
Which script should you use?
Mark for

98. What would happen if you issued a DELETE statement without a WHERE clause? Mark for Review
(1) Points

All the rows in the table would be deleted. (*)

An error message would be returned.

No rows would be deleted.

Only one row would be deleted.

Incorrect Incorrect. Refer to Section 7

99. The EMPLOYEES table contains the following columns:

EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2(20)
HIRE_DATE DATE
SALARY NUMBER(9,2)
BONUS NUMBER(9,2)

You want to execute one DML statement to change the salary of all employees in department 10 to equal the new salary of employee number 89898. Currently, all employees in department 10 have the same salary value. Which statement should you execute?
Mark for Review
(1) Points

UPDATE employee
SET salary = SELECT salary
FROM employee
WHERE emp_id = 89898;

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898);

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898)
WHERE dept = 10;

(*)

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898 AND dept = 10);

100. Which of the following represents the correct syntax for an INSERT statement? Mark for Review
(1) Points

INSERT VALUES INTO customers (3178 J. Smith 123 Main Street Nashville TN 37777;

INSERT INTO customers VALUES '3178' 'J.' 'Smith' '123 Main Street' 'Nashville' 'TN' '37777';

INSERT INTO customers VALUES ('3178', 'J.', 'Smith', '123 Main Street', 'Nashville', 'TN', '37777'); (*)

INSERT customers VALUES 3178, J., Smith, 123 Main Street, Nashville, TN, 37777;

Test: Mid Term Exam - Database Programming with SQL

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

Section 1 Lesson 1
(Answer all questions in this section)

1. Which SQL function can be used to remove heading or trailing characters (or both) from a character string? Mark for Review
(1) Points

LPAD

CUT

NVL2

TRIM (*)

Correct

2. Which three statements about functions are true? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

The SYSDATE function returns the Oracle Server date and time. (*)

The ROUND number function rounds a value to a specified decimal place or the nearest whole number. (*)

The CONCAT function can only be used on character strings, not on numbers.

The SUBSTR character function returns a portion of a string beginning at a defined character position to a specified length. (*)

Correct

3. You query the database with this SQL statement:

```
SELECT LOWER(SUBSTR(CONCAT(last_name, first_name)), 1, 5) "ID"
FROM employee;
```

In which order are the functions evaluated?
Mark for Review
(1) Points

LOWER, SUBSTR, CONCAT

LOWER, CONCAT, SUBSTR

SUBSTR, CONCAT, LOWER

CONCAT, SUBSTR, LOWER (*)

Correct

4. You need to return a portion of each employee's last name, beginning with the first character up to the fifth character. Which character function should you use?
Mark for Review
(1) Points

INSTR

TRUNC

SUBSTR (*)

CONCAT

Correct

5. You issue this SQL statement:

```
SELECT INSTR ('organizational sales', 'al')
FROM dual;
```

Which value is returned by this command?
Mark for Review
(1) Points

1

2

13 (*)

17

Correct

6. What will the following SQL statemtent display?

```
SELECT last_name, LPAD(salary, 15, '$')SALARY
FROM employees;
```

Mark for Review
(1) Points

The last name of employees that have a salary that includes a $ in the value, size of 15 and the column labeled SALARY.

The last name and the format of the salary limited to 15 digits to the left of the decimal and the column labeled SALARY.

The last name and salary for all employees with the format of the salary 15 characters long, left-padded with the $ and the column labeled SALARY. (*)

The query will result in an error: "ORA-00923: FROM keyword not found where expected."

Correct

7. Evaluate this SELECT statement:

```
SELECT LENGTH(email)
FROM employee;
```

What will this SELECT statement display?
Mark for Review
(1) Points

The longest e-mail address in the EMPLOYEE table.

The email address of each employee in the EMPLOYEE table.

The number of characters for each value in the EMAIL column in the employees table. (*)

The maximum number of characters allowed in the EMAIL column.

Correct

Section 1 Lesson 2
(Answer all questions in this section)

8. Which two functions can be used to manipulate number or date column values, but NOT character column values? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

RPAD

TRUNC (*)

ROUND (*)

INSTR

CONCAT

Correct

9. Which script displays '01-MAY-04' when the HIRE_DATE value is '20-MAY-04'? Mark for Review
(1) Points

SELECT TRUNC(hire_date, 'MONTH')
FROM employee;
(*)

SELECT ROUND(hire_date, 'MONTH')
FROM employee;

SELECT ROUND(hire_date, 'MON')
FROM employee;

SELECT TRUNC(hire_date, 'MI')
FROM employee;

Incorrect. Refer to Section 1 Lesson 3

10. You issue this SQL statement:

SELECT TRUNC(751.367,-1)
FROM dual;

Which value does this statement display?
Mark for Review
(1) Points

700

750 (*)

751

751.3

Correct

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

Section 1 Lesson 3
(Answer all questions in this section)

11. Which SELECT statement will NOT return a date value? Mark for Review
(1) Points

SELECT (30 + hire_date) + 1440/24
FROM employees;

SELECT (SYSDATE - hire_date) + 10*8
FROM employees;
(*)

SELECT SYSDATE - TO_DATE('25-JUN-02') + hire_date
FROM employees;

SELECT (hire_date - SYSDATE) + TO_DATE('25-JUN-02')
FROM employees;

Correct

12. You need to subtract three months from the current date. Which function should you use? Mark for Review
(1) Points

ROUND

TO_DATE

ADD_MONTHS (*)

MONTHS_BETWEEN

Correct

13. You need to display the number of months between today's date and each employee's hiredate. Which function should you use? Mark for Review
(1) Points

ROUND

BETWEEN

ADD_MONTHS

MONTHS_BETWEEN (*)

Correct

14. You need to display the current year as a character value (for example: Two Thousand and One). Which element would you use? Mark for Review
(1) Points

RR

YY

YYYY

YEAR (*)

Correct

15. Evaluate this SELECT statement:

```
SELECT SYSDATE + 30
FROM dual;
```

Which value is returned by the query?
Mark for Review
(1) Points

the current date plus 30 hours

the current date plus 30 days (*)

the current date plus 30 months

No value is returned because the SELECT statement generates an error.

Correct

Section 2 Lesson 1
(Answer all questions in this section)

16. All Human Resources data is stored in a table named EMPLOYEES. You have been asked to create a report that displays each employee's name and salary. Each employee's salary must be displayed in the following format: $000,000.00. Which function should you include in a SELECT statement to achieve the desired result? Mark for Review
(1) Points

TO_CHAR (*)

TO_DATE

TO_NUMBER

CHARTOROWID

Correct

17. Which best describes the TO_CHAR function? Mark for Review
(1) Points

The TO_CHAR function can be used to specify meaningful column names in an SQL statement's result set.

The TO_CHAR function can be used to remove text from column data that will be returned by the database.

The TO_CHAR function can be used to display dates and numbers according to formatting conventions that are supported by Oracle. (*)

The TO_CHAR function can only be used on DATE columns.

Correct

18. You have been asked to create a report that lists all customers who have placed orders of at least $2,500. The report's date should be displayed in the Day, Date Month, Year format (For example, Tuesday, 13 April, 2004). Which statement should you issue? Mark for Review
(1) Points

SELECT companyname, TO_CHAR (sysdate, 'fmdd, dy month, yyyy'), total FROM customers NATURAL JOIN orders

```
WHERE total >= 2500;
```

```
   SELECT companyname, TO_DATE (date, 'day, dd month, yyyy'), total
FROM customers NATURAL JOIN orders
WHERE total >= 2500;
```

```
   SELECT companyname, TO_DATE (sysdate, 'dd, dy month, yyyy'), total
FROM customers NATURAL JOIN orders
WHERE total >= 2500;
```

```
   SELECT companyname, TO_CHAR (sysdate, 'fmDay, dd Month, yyyy'), total
FROM customers NATURAL JOIN orders
WHERE total >= 2500;
```

(*)

Incorrect. Refer to Section 2

19. Which SQL Statement should you use to display the prices in this format: "$00.30"? Mark for Review
(1) Points

SELECT TO_CHAR(price, '$99,900.99') FROM product; (*)

SELECT TO_CHAR(price, "$99,900.99") FROM product;

SELECT TO_CHAR(price, '$99,990.99') FROM product;

SELECT TO_NUMBER(price, '$99,900.99') FROM product;

Correct

20. Which statement concerning single row functions is true? Mark for Review
(1) Points

Single row functions can accept only one argument, but can return multiple values.

Single row functions cannot modify a data type.

Single row functions can be nested. (*)

Single row functions return one or more results per row.

Correct

Test: Mid Term Exam - Database Programming with SQL

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

Section 2 Lesson 1
(Answer all questions in this section)

21. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
SALARY NUMBER(6)

You need to create a report to display the salaries of all employees. Which script should you use to display the salaries in format: "$45,000.00"?
Mark for Review
(1) Points

SELECT TO_CHAR(salary, '$999,999')
FROM employees;

SELECT TO_NUM(salary, '$999,990.99')
FROM employees;

SELECT TO_NUM(salary, '$999,999.00')
FROM employees;

SELECT TO_CHAR(salary, '$999,999.00')
FROM employees;
(*)

Correct

Section 2 Lesson 2
(Answer all questions in this section)

22. Which statement about group functions is true? Mark for Review
(1) Points

NVL and NVL2, but not COALESCE, can be used with group functions to replace null values.

NVL and COALESCE, but not NVL2, can be used with group functions to replace null values.

NVL, NVL2, and COALESCE can be used with group functions to replace null values. (*)

COALESCE, but not NVL and NVL2, can be used with group functions to replace null values.

Correct

23. The STYLES table contains this data:

STYLE_ID STYLE_NAME CATEGORY COST
895840 SANDAL 85940 12.00
968950 SANDAL 85909 10.00
869506 SANDAL 89690 15.00
809090 LOAFER 89098 10.00
890890 LOAFER 89789 14.00
857689 HEEL 85940 11.00
758960 SANDAL 86979

Evaluate this SELECT statement:

```
SELECT style_id, style_name, category, cost
FROM styles
WHERE style_name LIKE 'SANDAL' AND NVL(cost, 0) < 15.00
ORDER BY category, cost;
```

Which result will the query provide?

Mark for Review
(1) Points

STYLE_ID STYLE_NAME CATEGORY COST
895840 SANDAL 85940 12.00
968950 SANDAL 85909 10.00
758960 SANDAL 86979

STYLE_ID STYLE_NAME CATEGORY COST
895840 SANDAL 85909 12.00
968950 SANDAL 85909 10.00
869506 SANDAL 89690 15.00
758960 SANDAL 86979

STYLE_ID STYLE_NAME CATEGORY COST
895840 SANDAL 85909 12.00
968950 SANDAL 85909 10.00
758960 SANDAL 86979
869506 SANDAL 89690 15.00

STYLE_ID STYLE_NAME CATEGORY COST
968950 SANDAL 85909 10.00
895840 SANDAL 85940 12.00
758960 SANDAL 86979

(*)

Correct

24. You need to replace null values in the DEPT_ID column with the text "N/A". Which functions should you use? Mark for Review
(1) Points

TO_CHAR and NVL (*)

TO_CHAR and NULL

TO_CHAR and NULLIF

TO_NUMBER and NULLIF

Correct

Section 3 Lesson 2
(Answer all questions in this section)

25. Your have two tables named EMPLOYEES and SALES. You want to identify the sales representatives who have generated at least $100,000 in revenue.
Which query should you issue? Mark for Review
(1) Points

SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;

SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue >= 100000;
(*)

SELECT e.fname, e.lname, s.sales
FROM employees, sales
WHERE e.emp_id = s.emp_id AND revenue >= 100000;

SELECT fname, lname, sales
Q FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;

Correct

26. What is produced when a join condition is not specified in a multiple-table query? Mark for Review
(1) Points

a self-join

an outer join

an equijoin

a Cartesian product (*)

Correct

27. What happens when you create a Cartesian product? Mark for Review
(1) Points

All rows from one table are joined to all rows of another table (*)

The table is joined to itself, one column to the next column, exhausting all possibilities

The table is joined to another equal table

All rows that do not match in the WHERE clause are displayed

Correct

28. Which statement about the join syntax of a SELECT statement is true? Mark for Review
(1) Points

The ON keyword must be included.

The JOIN keyword must be included.

The FROM clause represents the join criteria.

The WHERE clause represents the join criteria. (*)

Correct

29. The CUSTOMERS and SALES tables contain these columns:
CUSTOMERS
CUST_ID NUMBER(10) PRIMARY KEY
COMPANY VARCHAR2(30)
LOCATION VARCHAR2(20)

SALES
SALES_ID NUMBER(5) PRIMARY KEY
CUST_ID NUMBER(10) FOREIGN KEY
TOTAL_SALES NUMBER(30)

Which SELECT statement will return the customer ID, the company and the total sales?

Mark for Review
(1) Points

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id (+);

SELECT cust_id, company, total_sales
FROM customers, sales
WHERE cust_id = cust_id;

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;
(*)

SELECT cust_id, company, total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;

Correct

30. You need to create a report that lists all employees in the Sales department who do not earn $25,000 per year. Which query should you issue to accomplish this task?
Mark for Review
(1) Points

SELECT last_name, first_name, salary
FROM employees
WHERE salary > 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary = 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary <= 25000 AND dept_id = 10;

SELECT last_name, first_name, salary

FROM employees
WHERE salary != 25000 AND dept_id = 10;
(*)

Correct

Test: Mid Term Exam - Database Programming with SQL

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

Section 3 Lesson 4
(Answer all questions in this section)

31. Which two operators can be used in an outer join condition using the outer join operator (+)? Mark for Review
(1) Points

AND and = (*)

OR and =

BETWEEN...AND... and IN

IN and =

Correct

32. Which operator would you use after one of the column names in the WHERE clause when creating an outer join? Mark for Review
(1) Points

(+) (*)

*

+

=

Correct

33. Which of the following best describes the function of an outer join? Mark for Review
(1) Points

An outer join will return only those rows that do not meet the join criteria.

An outer join will return only data from the far left column in one table and the far right column in the other table.

An outer join will return data only if both tables contain an identical pair of columns.

An outer join will return all rows that meet the join criteria and will return NULL values from one table if no rows from the other table satisfy the join criteria. (*)

Correct

Section 4 Lesson 2
(Answer all questions in this section)

34. You need to join all the rows in the EMPLOYEE table to all the rows in the EMP_REFERENCE table. Which type of join should you create? Mark for Review
(1) Points

An equijoin

A cross join (*)

An inner join

A full outer join

Correct

35. Which statement about a natural join is true? Mark for Review

(1) Points

Columns with the same names must have identical data types.

Columns with the same names must have the same precision and datatype. (*)

Columns with the same names must have compatible data types.

Columns with the same names cannot be included in the SELECT list of the query.

Correct

36. A join between tables where the result set includes matching values from both tables but does NOT return any unmatched rows could be called which of the following? (Choose three) Mark for Review
(1) Points

(Choose all correct answers)

Equijoin (*)

Self join (*)

Nonequijoin

Simple join (*)

full outer join

Incorrect. Refer to Section 4

Section 4 Lesson 3
(Answer all questions in this section)

37. Evaluate this SELECT statement:

```
SELECT a.lname || ', ' || a.fname as "Patient", b.lname || ', ' || b.fname as "Physician",
c.admission
FROM patient a
JOIN physician b
ON (b.physician_id = c.physician_id);
JOIN admission c
ON (a.patient_id = c.patient_id);
```

Which clause generates an error?
Mark for Review
(1) Points

JOIN physician b

ON (b.physician_id = c.physician_id); (*)

JOIN admission c

ON (a.patient_id = c.patient_id)

Correct

38. Which of the following statements is the simplest description of a nonequijoin?
Mark for Review
(1) Points

A join condition containing something other than an equality operator (*)

A join condition that is not equal to other joins.

A join condition that includes the (+) on the left hand side.

A join that joins a table to itself

Correct

39. Which SELECT clause creates an equijoin by specifying a column name common to both tables? Mark for Review
(1) Points

A HAVING clause

The FROM clause

The SELECT clause

A USING clause (*)

Correct

40. For which condition would you use an equijoin query with the USING keyword? Mark for Review

(1) Points

You need to perform a join of the CUSTOMER and ORDER tables but limit the number of columns in the join condition. (*)

The ORDER table contains a column that has a referential constraint to a column in the PRODUCT table.

The CUSTOMER and ORDER tables have no columns with identical names.

The CUSTOMER and ORDER tables have a corresponding column, CUST_ID. The CUST_ID column in the ORDER table contains null values that need to be displayed.

Correct

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

Section 4 Lesson 4
(Answer all questions in this section)

41. What should be included in a SELECT statement to return NULL values from all tables? Mark for Review
(1) Points

natural joins

left outer joins

full outer joins (*)

right outer joins

Incorrect. Refer to Section 4

42. Which two sets of join keywords create a join that will include unmatched rows from the first table specified in the SELECT statement? Mark for Review
(1) Points

LEFT OUTER JOIN and FULL OUTER JOIN (*)

RIGHT OUTER JOIN and LEFT OUTER JOIN

USING and HAVING

OUTER JOIN and USING

Correct

43. Which query will retrieve all the rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table? Mark for Review
(1) Points

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
RIGHT OUTER JOIN departments d ON (e.department_id = d.department_id);

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
NATURAL JOIN departments d;

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
LEFT OUTER JOIN departments d ON (e.department_id = d.department_id);
(*)

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
JOIN departments d USING (e.department_id = d.department_id);

Correct

(Answer all questions in this section)

44. What will the following SQL Statement do?

```
SELECT job_id, COUNT(*)
FROM employees
GROUP BY job_id;
```

Mark for Review
(1) Points

Displays all the employees and groups them by job.

Displays each job id and the number of people assigned to that job id. (*)

Displays only the number of job_ids.

Displays all the jobs with as many people as there are jobs.

Correct

45. What is the best explanation as to why this SQL statement will NOT execute?

```
SELECT department_id "Department", AVG (salary)"Average"
FROM employees
GROUP BY Department;
```

Mark for Review
(1) Points

Salaries cannot be averaged as not all the numbers will divide evenly.

You cannot use a column alias in the GROUP BY clause. (*)

The GROUP BY clause must have something to GROUP.

The department id is not listed in the departments table.

Correct

46. Which statement about the GROUP BY clause is true? Mark for Review
(1) Points

The first column listed in the GROUP BY clause is the most major grouping. (*)

The last column listed in the GROUP BY clause is the most major grouping.

The GROUP BY clause can contain an aggregate function.

A GROUP BY clause cannot be used without an ORDER BY clause.

Correct

47. Group functions can be nested to a depth of? Mark for Review
(1) Points

three

four

two (*)

Group functions cannot be nested.

Correct

Section 5 Lesson 2
(Answer all questions in this section)

48. Which group functions below act on character, number and date data types? (Choose more than one answer) Mark for Review
(1) Points

(Choose all correct answers)

SUM

MAX (*)

MIN (*)

AVG

COUNT (*)

Correct

49. You need to calculate the standard deviation for the cost of products produced in the Birmingham facility. Which group function will you use? Mark for Review
(1) Points

STDEV

STDDEV (*)

VAR_SAMP

VARIANCE

Correct

50. The CUSTOMER table contains these columns:
CUSTOMER_ID NUMBER(9)
FNAME VARCHAR2(25)
LNAME VARCHAR2(30)
CREDIT_LIMIT NUMBER (7,2)
CATEGORY VARCHAR2(20)

You need to calculate the average credit limit for all the customers in each category. The average should be calculated based on all the rows in the table excluding any customers who have not yet been assigned a credit limit value. Which group function should you use to calculate this value?
Mark for Review
(1) Points

AVG (*)

SUM

COUNT

STDDEV

Correct

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

Section 5 Lesson 2
(Answer all questions in this section)

51. Which group function would you use to display the average price of all products in the PRODUCTS table? Mark for Review
(1) Points

SUM

AVG (*)

COUNT

MAX

Correct

52. Which group function would you use to display the highest salary value in the EMPLOYEE table? Mark for Review
(1) Points

AVG

COUNT

MAX (*)

MIN

Correct

53. Examine the data in the PAYMENT table:
PAYMENT_ID CUSTOMER_ID PAYMENT_DATE PAYMENT_TYPE PAYMENT_AMOUNT
86590586 8908090 10-JUN-03 BASIC 859.00
89453485 8549038 15-FEB-03 INTEREST 596.00
85490345 5489304 20-MAR-03 BASIC 568.00

You need to determine the average payment amount made by each customer in January, February and March of 2003. Which SELECT statement should you use?
Mark for Review
(1) Points

```
   SELECT AVG(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '31-MAR-2003';
(*)


   SELECT AVG(payment_amount)
FROM payment;


   SELECT SUM(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' and '31-MAR-2003';


   SELECT AVG(payment_amount)
FROM payment
WHERE TO_CHAR(payment_date) IN (JAN, FEB, MAR);
```

Correct

54. The EMPLOYEES table contains these columns:
EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(20)
FIRST_NAME VARCHAR2(20)
SALARY NUMBER(9,2)
HIRE_DATE DATE
BONUS NUMBER(7,2)
COMM_PCT NUMBER(4,2)

Which three functions could be used with the HIRE_DATE, LAST_NAME, or SALARY columns? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

MAX (*)

SUM

AVG

MIN (*)

COUNT (*)

Correct

55. Group functions return a value for _____ and _____ null values in their computations. Mark for Review
(1) Points

a row set, ignore (*)

each row, ignore

a row set, include

each row, include

Correct

Section 5 Lesson 3
(Answer all questions in this section)

56. Which statement about the COUNT function is true? Mark for Review
(1) Points

The COUNT function ignores duplicates by default.

The COUNT function always ignores null values by default. (*)

The COUNT function can be used to find the maximum value in each column.

The COUNT function can be used to determine the number of unique, non-null values in a column.

Incorrect. Refer to Section 5

57. The EMPLOYEES table contains these columns:
EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(20)
FIRST_NAME VARCHAR2(20)
SALARY NUMBER(7,2)
DEPARTMENT_ID NUMBER(9)

You need to display the number of employees whose salary is greater than $50,000? Which SELECT would you use?
Mark for Review
(1) Points

SELECT * FROM employees
WHERE salary > 50000;

SELECT * FROM employees
WHERE salary < 50000;

SELECT COUNT(*) FROM employees
WHERE salary < 50000;

SELECT COUNT(*) FROM employees
WHERE salary > 50000;
(*)

SELECT COUNT(*) FROM employees
WHERE salary > 50000
GROUP BY employee_id, last_name, first_name, salary, department_id;

Correct

58. Group functions can avoid computations involving duplicate values by including which keyword? Mark for Review
(1) Points

NULL

DISTINCT (*)

SELECT

UNLIKE

Correct

59. Examine the data from the LINE_ITEM table:
LINE_ITEM_ID ORDER_ID PRODUCT_ID PRICE DISCOUNT
890898 847589 848399 8.99 0.10

768385 862459 849869 5.60 0.05
867950 985490 945809 5.60
954039 439203 438925 5.25 0.15
543949 349302 453235 4.50

You query the LINE_ITEM table and a value of 5 is returned. Which SQL statement did you execute?
Mark for Review
(1) Points

SELECT COUNT(discount) FROM line_item;

SELECT COUNT(*) FROM line_item; (*)

SELECT SUM(discount) FROM line_item;

SELECT AVG(discount) FROM line_item;

Correct

Section 6 Lesson 1
(Answer all questions in this section)

60. The PRODUCTS table contains these columns:
PRODUCT_ID NUMBER(9) PK
CATEGORY_ID VARCHAR2(10)
LOCATION_ID NUMBER(9)
DESCRIPTION VARCHAR2(30)
COST NUMBER(7,2)
PRICE NUMBER(7,2)
QUANTITY NUMBER

You display the total of the extended costs for each product category by location. You need to include only the products that have a price less than $25.00. The extended cost of each item equals the quantity value multiplied by the cost value.
Which SQL statement will display the desired result?
Mark for Review
(1) Points

SELECT category_id, SUM(cost * quantity) TOTAL,location_id
FROM products
WHERE price > 25.00
GROUP BY category_id, location_id;

```
   SELECT SUM(cost * quantity) TOTAL, location_id
FROM products
WHERE price < 25.00
GROUP BY location_id;
```

```
   SELECT category_id, SUM(cost * quantity) TOTAL, location_id
FROM products
WHERE price < 25.00
GROUP BY category_id, location_id;
```

(*)

```
   SELECT SUM(cost * quantity) TOTAL
FROM products
WHERE price < 25.00;
```

Incorrect. Refer to Section 6

Test: Mid Term Exam - Database Programming with SQL

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

Section 6 Lesson 1
(Answer all questions in this section)

61. Evaluate this SELECT statement:

```
SELECT SUM(salary), dept_id
FROM employee
GROUP BY dept_id;
```

How are the results of this statement sorted?
Mark for Review
(1) Points

Ascending order by dept_id (*)

Descending order by dept_id

Ascending order by cumulative salary

Descending order by cumulative salary

Correct

62. The PLAYERS table contains these columns:
PLAYER_ID NUMBER PK
PLAYER_NAME VARCHAR2 (30)
TEAM_ID NUMBER
HIRE_DATE DATE
SALARY NUMBER (8,2)

Which two clauses represent valid uses of aggregate functions? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

ORDER BY AVG(salary)

GROUP BY MAX(salary) (*)

SELECT AVG(NVL(salary, 0)) (*)

HAVING MAX(salary) > 10000 (*)

WHERE hire_date > AVG(hire_date)

Correct

63. Evaluate this SELECT statement:
SELECT SUM(salary), dept_id, mgr_id
FROM employee
GROUP BY dept_id, mgr_id;

Which SELECT statement clause allows you to restrict the rows returned, based on a group function?
Mark for Review
(1) Points

HAVING SUM(salary) > 100000 (*)

WHERE SUM(salary) > 100000

WHERE salary > 100000

HAVING salary > 100000

Incorrect. Refer to Section 6

64. The MANUFACTURER table contains these columns:
MANUFACTURER_ID NUMBER
MANUFACTURER_NAME VARCHAR2(30)
TYPE VARCHAR2(25)
LOCATION_ID NUMBER

You need to display the number of unique types of manufacturers at each location.
Which SELECT statement should you use?
Mark for Review
(1) Points

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY location_id;
(*)

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer;

SELECT location_id, COUNT(type)
FROM manufacturer
GROUP BY location_id;

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY type;

Incorrect. Refer to Section 6

65. Evaluate this SELECT statement:
SELECT SUM(salary), dept_id, department_name
FROM employee
WHERE dept_id = 1
GROUP BY department;

Which clause of the SELECT statement contains a syntax error?
Mark for Review
(1) Points

SELECT

FROM

WHERE

GROUP BY (*)

Incorrect. Refer to Section 6

66. Which statement about the GROUP BY clause is true? Mark for Review
(1) Points

To exclude rows before dividing them into groups using the GROUP BY clause, you use should a WHERE clause. (*)

You can use a column alias in a GROUP BY clause.

By default, rows are not sorted when a GROUP BY clause is used.

You must use the HAVING clause with the GROUP BY clause.

Correct

67. The PAYMENT table contains these columns:
PAYMENT_ID NUMBER(9) PK
PAYMENT_DATE DATE
CUSTOMER_ID NUMBER(9)

Which SELECT statement could you use to display the number of times each customer made a payment between January 1, 2003 and June 30, 2003 ?
Mark for Review
(1) Points

SELECT customer_id, COUNT(payment_id)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '30-JUN-2003'
GROUP BY customer_id;
(*)

```
SELECT COUNT(payment_id)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '30-JUN-2003';
```

```
SELECT customer_id, COUNT(payment_id)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '30-JUN-2003';
```

```
SELECT COUNT(payment_id)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '30-JUN-2003'
GROUP BY customer_id;
```

Incorrect. Refer to Section 6

Section 6 Lesson 2
(Answer all questions in this section)

68. Which statement about subqueries is true? Mark for Review
(1) Points

Subqueries should be enclosed in double quotation marks.

Subqueries cannot contain group functions.

Subqueries are often used in a WHERE clause to return values for an unknown conditional value. (*)

Subqueries generally execute last, after the main or outer query executes.

Correct

69. Which operator can be used with subqueries that return only one row? Mark for Review
(1) Points

LIKE (*)

ANY

ALL

IN

Correct

70. If you use the equality operator (=) with a subquery, how many values can the subquery return? Mark for Review
(1) Points

only 1 (*)

up to 2

up to 5

unlimited

Correct

Test: Mid Term Exam - Database Programming with SQL

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

Section 6 Lesson 2
(Answer all questions in this section)

71. You need to display all the players whose salaries are greater than or equal to John Brown's salary. Which comparison operator should you use? Mark for Review
(1) Points

=

>

<=

>= (*)

Correct

72. Examine the structures of the CUSTOMER and ORDER_HISTORY tables:
CUSTOMER
CUSTOMER_ID NUMBER(5)
NAME VARCHAR2(25)
CREDIT_LIMIT NUMBER(8,2)
OPEN_DATE DATE

ORDER_HISTORY
ORDER_ID NUMBER(5)
CUSTOMER_ID NUMBER(5)
ORDER_DATE DATE
TOTAL NUMBER(8,2)

Which of the following scenarios would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the date each customer account was opened.

You need to display each date that a customer placed an order.

You need to display all the orders that were placed on a certain date.

You need to display all the orders that were placed on the same day as order number 25950. (*)

Correct

Section 6 Lesson 3
(Answer all questions in this section)

73. You need to produce a report that contains all employee-related information for those employees who have Brad Carter as a supervisor. However, you are not sure which supervisor ID belongs to Brad Carter. Which query should you issue to accomplish this task? Mark for Review
(1) Points

```
   SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');


   SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');


   SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT employee_id
    FROM supervisors
    WHERE last_name = 'Carter');


   SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT employee_id
    FROM employees
    WHERE last_name = 'Carter');
(*)
```

Correct

74. Examine the structure of the EMPLOYEE, DEPARTMENT, and ORDERS tables.

```
EMPLOYEE
EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2(25)
FIRST_NAME VARCHAR2(25)
DEPARTMENT_ID NUMBER(9)

DEPARTMENT
DEPARTMENT_ID NUMBER(9)
DEPARTMENT_NAME VARCHAR2(25)
CREATION_DATE DATE
```

ORDERS
ORDER_ID NUMBER(9)
EMPLOYEE_ID NUMBER(9)
DATE DATE
CUSTOMER_ID NUMBER(9)

You want to display all employees who had an order after the Sales department was established. Which of the following constructs would you use?
Mark for Review
(1) Points

a group function

a single-row subquery (*)

the HAVING clause

a MERGE statement

Incorrect. Refer to Section 6

75. Which best describes a single-row subquery? Mark for Review
(1) Points

a query that returns only one row from the inner SELECT statement (*)

a query that returns one or more rows from the inner SELECT statement

a query that returns only one column value from the inner SELECT statement

a query that returns one or more column values from the inner SELECT statement

Correct

Section 6 Lesson 4
(Answer all questions in this section)

76. Evaluate this SELECT statement:

```
SELECT customer_id, name
FROM customer
WHERE customer_id IN
  (SELECT customer_id
   FROM customer
   WHERE state_id = 'GA' AND credit_limit > 500.00);
```

What would happen if the inner query returned null?
Mark for Review
(1) Points

An error would be returned.

No rows would be returned by the outer query. (*)

All the rows in the table would be selected.

Only the rows with CUSTOMER_ID values equal to null would be selected.

Correct

77. Which of the following best describes the meaning of the ANY operator? Mark for Review
(1) Points

Equal to any member in the list

Compare value to each value returned by the subquery (*)

Compare value to every value returned by the subquery

Equal to each value in the list

Correct

78. Which of the following statements contains a comparison operator that is used to restrict rows based on a list of values returned from an inner query? Mark for Review
(1) Points

SELECT description
FROM d_types
WHERE code IN (SELECT type_code FROM d_songs);

SELECT description
FROM d_types
WHERE code = ANY (SELECT type_code FROM d_songs);

SELECT description
FROM d_types

```
WHERE code <> ALL (SELECT type_code FROM d_songs);
```

All of the above. (*)

Correct

79. Examine the data in the PAYMENT table:

```
PAYMENT_ID  CUSTOMER_ID  PAYMENT_DATE  PAYMENT_TYPE
PAYMENT_AMOUNT
86590586  8908090  10-JUN-03  BASIC  859.00
89453485  8549038  15-FEB-03  INTEREST  596.00
85490345  5489304  20-MAR-03  BASIC  568.00
```

This statement fails when executed:

```
SELECT customer_id, payment_type
FROM payment
WHERE payment_id =
  (SELECT payment_id
   FROM payment
   WHERE payment_amount = 596.00 OR payment_date = '20-MAR-2003');
```

Which change could correct the problem?
Mark for Review
(1) Points

Change the outer query WHERE clause to 'WHERE payment_id IN'. (*)

Remove the quotes surrounding the date value in the OR clause.

Remove the parentheses surrounding the nested SELECT statement.

Change the comparison operator to a single-row operator.

Correct

80. What is wrong with the following query?

```
SELECT employee_id, last_name
FROM employees
WHERE salary =
  (SELECT MIN(salary) FROM employees GROUP BY department_id);
```

Mark for Review
(1) Points

Single rows contain multiple values and a logical operator is used.

Subquery returns more than one row and single row comparison operator is used. (*)

Subquery references the wrong table in the WHERE clause.

Nothing, it will run without problems.

Correct

Test: Mid Term Exam - Database Programming with SQL

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

Section 6 Lesson 4
(Answer all questions in this section)

81. Evaluate this SELECT statement:

```
SELECT player_id, name
FROM players
WHERE team_id IN
  (SELECT team_id
   FROM teams
   WHERE team_id > 300 AND salary_cap > 400000);
```

What would happen if the inner query returned a NULL value?
Mark for Review
(1) Points

No rows would be returned by the outer query. (*)

A syntax error in the outer query would be returned.

A syntax error in the inner query would be returned.

All the rows in the PLAYER table would be returned by the outer query.

Correct

82. Evaluate this SELECT statement that includes a subquery:

```
SELECT last_name, first_name
FROM customer
WHERE area_code IN
  (SELECT area_code FROM sales WHERE salesperson_id = 20);
```

Which statement is true about the given subquery?
Mark for Review
(1) Points

The outer query executes before the nested subquery.

The results of the inner query are returned to the outer query. (*)

An error occurs if the either the inner or outer queries do not return a value.

Both the inner and outer queries must return a value, or an error occurs.

Correct

83. Which statement about single-row and multiple-row subqueries is true? Mark for Review
(1) Points

Multiple-row subqueries cannot be used with the LIKE operator. (*)

Single-row operators can be used with both single-row and multiple-row subqueries.

Multiple-row subqueries can be used with both single-row and multiple-row operators.

Multiple-row subqueries can only be used in SELECT statements.

Correct

84. You need to create a SELECT statement that contains a multiple-row subquery, which comparison operator(s) can you use? Mark for Review
(1) Points

IN, ANY, and ALL (*)

LIKE

BETWEEN...AND...

=, <, and >

Correct

85. Which statement about the ANY operator when used with a multiple-row subquery is true? Mark for Review
(1) Points

The ANY operator compares every value returned by the subquery. (*)

The ANY operator can be used with the DISTINCT keyword.

The ANY operator is a synonym for the ALL operator.

The ANY operator can be used with the LIKE and IN operators.

Correct

86. What would happen if you attempted to use a single-row operator with a multiple-row subquery? Mark for Review
(1) Points

An error would be returned. (*)

No rows will be selected.

All the rows will be selected.

The data returned may or may not be correct.

Correct

Section 7 Lesson 1
(Answer all questions in this section)

87. You need to copy rows from the EMPLOYEE table to the EMPLOYEE_HIST table. What could you use in the INSERT statement to accomplish this task? Mark for Review
(1) Points

an ON clause

a SET clause

a subquery (*)

a function

Correct

88. The PRODUCTS table contains these columns:
PRODUCT_ID NUMBER NOT NULL
PRODUCT_NAME VARCHAR2 (25)
SUPPLIER_ID NUMBER NOT NULL
LIST_PRICE NUMBER (7,2)
COST NUMBER (5,2)
QTY_IN_STOCK NUMBER(4)
LAST_ORDER_DT DATE NOT NULL DEFAULT SYSDATE

Which INSERT statement will execute successfully?
Mark for Review
(1) Points

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, 700); (*)

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, SYSDATE);

INSERT INTO products(product_id, product_name) VALUES (2958, 'Cable');

INSERT INTO products(product_id, product_name, supplier_id VALUES (2958, 'Cable', 8690, SYSDATE);

Correct

89. You have been instructed to add a new customer to the CUSTOMERS table. Because the new customer has not had a credit check, you should not add an amount to the CREDIT column.
The CUSTOMERS table contains these columns:
CUST_ID NUMBER(10)
COMPANY VARCHAR2(30)

CREDIT NUMBER(10)
POC VARCHAR2(30)
LOCATION VARCHAR2(30)

Which two INSERT statements will accomplish your objective?
Mark for Review
(1) Points

(Choose all correct answers)

INSERT INTO customers (cust_id, company, poc, location)
VALUES (200, 'InterCargo', 'tflanders', 'samerica');
(*)

INSERT INTO customers
VALUES (200, 'InterCargo', null, 'tflanders', 'samerica');
(*)

INSERT INTO customers
VALUES (cust_id, company, credit, poc, location) (200, 'InterCargo', 0, 'tflanders', 'samerica');

INSERT INTO customers
VALUES (200, InterCargo, 0, tflanders, samerica);

Correct

90. Assume all the column names are correct. The following SQL statement will execute which of the following?
INSERT INTO departments (department_id, department_name, manager_id, location_id)
VALUES (70, 'Public Relations', 100, 1700);

Mark for Review
(1) Points

100 will be inserted into the department_id column

1700 will be inserted into the manager_id column

70 will be inserted into the department_id column (*)

'Public Relations' will be inserted into the manager_name column

Correct

Test: Mid Term Exam - Database Programming with SQL

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

Section 7 Lesson 2
(Answer all questions in this section)

91. You need to remove a row from the EMPLOYEE table. Which statement would you use? Mark for Review
(1) Points

UPDATE with a WHERE clause

INSERT with a WHERE clause

DELETE with a WHERE clause (*)

MERGE with a WHERE clause

Correct

92. One of your employees was recently married. Her employee ID is still 189, however, her last name is now Rockefeller. Which SQL statement will allow you to reflect this change? Mark for Review
(1) Points

INSERT INTO my_employees SET last_name = 'Rockefeller' WHERE employee_ID = 189;

INSERT my_employees SET last_name = 'Rockefeller' WHERE employee_ID = 189;

UPDATE INTO my_employees SET last_name = 'Rockefeller' WHERE employee_ID = 189;

UPDATE my_employees SET last_name = 'Rockefeller' WHERE employee_ID = 189; (*)

Correct

93. You want to enter a new record into the CUSTOMERS table. Which two commands can be used to create new rows? Mark for Review
(1) Points

INSERT, CREATE

MERGE, CREATE

INSERT, MERGE (*)

INSERT, UPDATE

Correct

94. The EMPLOYEES table contains the following columns:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2(20)
HIRE_DATE DATE
SALARY NUMBER(9,2)
BONUS NUMBER(9,2)

You need to increase the salary for all employees in department 10 by 10 percent.
You also need to increase the bonus for all employees in department 10 by 15 percent.
Which statement should you use?
Mark for Review
(1) Points

UPDATE employees
SET salary = salary * 1.10, bonus = bonus * 1.15
WHERE dept = 10;
(*)

UPDATE employees
SET salary = salary * 1.10 AND bonus = bonus * 1.15
WHERE dept = 10;

```
   UPDATE employees
SET (salary = salary * 1.10) SET (bonus = bonus * 1.15)
WHERE dept = 10;
```

```
   UPDATE employees
SET salary = salary * .10, bonus = bonus * .15
WHERE dept = 10;
```

Incorrect. Refer to Section 7

95. One of the sales representatives, Janet Roper, has informed you that she was recently married, and she has requested that you update her name in the employee database. Her new last name is Cooper. Janet is the only person with the last name of Roper that is employed by the company. The EMPLOYEES table contains these columns and all data is stored in lowercase:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2 (20)
HIRE_DATE DATE
SALARY NUMBER(10)

Which UPDATE statement will accomplish your objective?
Mark for Review
(1) Points

```
   UPDATE employees
SET lname = 'cooper'
WHERE lname = 'roper';
```
(*)

```
   UPDATE employees lname = 'cooper'
WHERE lname = 'roper';
```

```
   UPDATE employees
SET lname = 'roper'
WHERE lname = 'cooper';
```

```
   UPDATE employees
SET cooper = 'lname'
WHERE lname = 'roper';
```

Correct

96. What would happen if you issued a DELETE statement without a WHERE clause? Mark for Review
(1) Points

All the rows in the table would be deleted. (*)

An error message would be returned.

No rows would be deleted.

Only one row would be deleted.

Correct

97. Which of the following represents the correct syntax for an INSERT statement? Mark for Review
(1) Points

INSERT VALUES INTO customers (3178 J. Smith 123 Main Street Nashville TN 37777;

INSERT INTO customers VALUES '3178' 'J.' 'Smith' '123 Main Street' 'Nashville' 'TN' '37777';

INSERT INTO customers VALUES ('3178', 'J.', 'Smith', '123 Main Street', 'Nashville', 'TN', '37777'); (*)

INSERT customers VALUES 3178, J., Smith, 123 Main Street, Nashville, TN, 37777;

Correct

98. The PLAYERS table contains these columns:
PLAYER_ID NUMBER NOT NULL
PLAYER_LNAME VARCHAR2(20) NOT NULL
PLAYER_FNAME VARCHAR2(10) NOT NULL
TEAM_ID NUMBER
SALARY NUMBER(9,2)

You need to increase the salary of each player for all players on the Tiger team by 12.5 percent. The TEAM_ID value for the Tiger team is 5960. Which statement should you use?
Mark for Review
(1) Points

UPDATE players (salary) SET salary = salary * 1.125;

UPDATE players SET salary = salary * .125 WHERE team_id = 5960;

UPDATE players SET salary = salary * 1.125 WHERE team_id = 5960; (*)

UPDATE players (salary) VALUES(salary * 1.125) WHERE team_id = 5960;

Correct

99. You need to update the expiration date of products manufactured before June 30th . In which clause of the UPDATE statement will you specify this condition?
Mark for Review
(1) Points

the ON clause

the WHERE clause (*)

the SET clause

the USING clause

Correct

100. You need to delete a record in the EMPLOYEES table for Tim Jones, whose unique employee identification number is 348. The EMPLOYEES table contains these columns:
ID_NUM NUMBER(5) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
ADDRESS VARCHAR2(30)
PHONE NUMBER(10)

Which DELETE statement will delete the appropriate record without deleting any additional records?
Mark for Review
(1) Points

DELETE FROM employees WHERE id_num = 348; (*)

DELETE FROM employees WHERE lname = jones;

DELETE * FROM employees WHERE id_num = 348;

DELETE 'jones' FROM employees;

Correct

1. Which SQL function can be used to remove heading or trailing characters (or both) from a character string? Mark for Review
(1) Points

LPAD

CUT

NVL2

TRIM (*)

Correct

2. Which three statements about functions are true? (Choose three.) Mark for Review
(1) Points

(Choose all correct answers)

The SYSDATE function returns the Oracle Server date and time. (*)

The ROUND number function rounds a value to a specified decimal place or the nearest whole number. (*)

The CONCAT function can only be used on character strings, not on numbers.

The SUBSTR character function returns a portion of a string beginning at a defined character position to a specified length. (*)

Correct

You query the database with this SQL statement:

```
SELECT LOWER(SUBSTR(CONCAT(last_name, first_name)), 1, 5) "ID"
FROM employee;
```

In which order are the functions evaluated?
Mark for Review
(1) Points

LOWER, SUBSTR, CONCAT

LOWER, CONCAT, SUBSTR

SUBSTR, CONCAT, LOWER

CONCAT, SUBSTR, LOWER (*)

Correct

4. The STYLES table contains this data:

```
STYLE_ID  STYLE_NAME  CATEGORY  COST
895840  SANDAL  85940  12.00
968950  SANDAL  85909  10.00
869506  SANDAL  89690  15.00
809090  LOAFER  89098  10.00
890890  LOAFER  89789  14.00
857689  HEEL 85940  11.00
758960  SANDAL  86979 11.00
```

You query the database and return the value 40. Which script did you use?
Mark for Review
(1) Points

```
SELECT INSTR(category, 2,2)
FROM styles
WHERE style_id = 895840;
```

```
SELECT INSTR(category, -2,2)
FROM styles
WHERE style_id = 895840;
```

```
   SELECT SUBSTR(category, 2,2)
FROM styles
WHERE style_id = 895840;
```
(*)

```
   SELECT SUBSTR(category, -2,2)
FROM styles
WHERE style_id = 758960;
```

Correct

You issue this SQL statement:

```
SELECT INSTR ('organizational sales', 'al')
FROM dual;
```

Which value is returned by this command?
Mark for Review
(1) Points

1

2

13 (*)

17

Correct

6. You need to display the number of characters in each customer's last name. Which function should you use? Mark for Review
(1) Points

LENGTH (*)

LPAD

COUNT

SUBSTR

Correct

7. What will the following SQL statemtent display?

```
SELECT last_name, LPAD(salary, 15, '$')SALARY
FROM employees;
```

Mark for Review
(1) Points

The last name of employees that have a salary that includes a $ in the value, size of 15 and the column labeled SALARY.

The last name and the format of the salary limited to 15 digits to the left of the decimal and the column labeled SALARY.

The last name and salary for all employees with the format of the salary 15 characters long, left-padded with the $ and the column labeled SALARY. (*)

The query will result in an error: "ORA-00923: FROM keyword not found where expected."

Correct

. You issue this SQL statement:

```
SELECT ROUND (1282.248, -2)
FROM dual;
```

What value does this statement produce?
Mark for Review
(1) Points

1200

1282

1282.25

1300 (*)

Correct

9. Evaluate this function: MOD (25, 2) Which value is returned? Mark for Review
(1) Points

1 (*)

2

25

0

Correct

10. Which comparison operator retrieves a list of values? Mark for Review
(1) Points

IN (*)

LIKE

BETWEEN...IN...

IS NULL

Incorrect. Refer to Section 1 Lesson 1

11. Which function would you use to return the current database server date and time? Mark for Review
(1) Points

DATE

SYSDATE (*)

DATETIME

CURRENTDATE

Correct

12. You need to display the number of months between today's date and each employee's hiredate. Which function should you use? Mark for Review
(1) Points

ROUND

BETWEEN

ADD_MONTHS

MONTHS_BETWEEN (*)

Correct

13. You need to subtract three months from the current date. Which function should you use? Mark for Review
(1) Points

ROUND

TO_DATE

ADD_MONTHS (*)

MONTHS_BETWEEN

Incorrect. Refer to Section 1

14. Which of the following Date Functions will add calendar months to a date? Mark for Review
(1) Points

Months + Calendar (Month)

ADD_MONTHS (*)

MONTHS + Date

NEXT_MONTH

Correct

15. Evaluate this SELECT statement:

```
SELECT SYSDATE + 30
FROM dual;
```

Which value is returned by the query?
Mark for Review
(1) Points

the current date plus 30 hours

the current date plus 30 days (*)

the current date plus 30 months

No value is returned because the SELECT statement generates an error.

Incorrect. Refer to Section 1

16. Which SQL Statement should you use to display the prices in this format: "$00.30"? Mark for Review
(1) Points

SELECT TO_CHAR(price, '$99,900.99') FROM product; (*)

SELECT TO_CHAR(price, "$99,900.99") FROM product;

SELECT TO_CHAR(price, '$99,990.99') FROM product;

SELECT TO_NUMBER(price, '$99,900.99') FROM product;

Correct

17. All Human Resources data is stored in a table named EMPLOYEES. You have been asked to create a report that displays each employee's name and salary. Each employee's salary must be displayed in the following format: $000,000.00. Which function should you include in a SELECT statement to achieve the desired result? Mark for Review
(1) Points

TO_CHAR (*)

TO_DATE

TO_NUMBER

CHARTOROWID

Incorrect. Refer to Section 2

18. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
HIRE_DATE DATE

You need to display HIRE_DATE values in this format:

January 28, 2000

Which SELECT statement could you use?
Mark for Review
(1) Points

SELECT TO_CHAR(hire_date, Month DD, YYYY)
FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD, YYYY')
FROM employees;
(*)

SELECT hire_date(TO_CHAR 'Month DD', ' YYYY')
FROM employees;

SELECT TO_CHAR(hire_date, 'Month DD', ' YYYY')
FROM employees;

Incorrect. Refer to Section 2

19. Which two statements concerning SQL functions are true? (Choose two.) Mark for Review
(1) Points

(Choose all correct answers)

Character functions can accept numeric input.

Not all date functions return date values. (*)

Number functions can return number or character values.

Conversion functions convert a value from one data type to another data type. (*)

Single-row functions manipulate groups of rows to return one result per group of rows.

Incorrect. Refer to Section 2

20. The EMPLOYEES table contains these columns:

EMPLOYEE_ID NUMBER(9)
LAST_NAME VARCHAR2 (25)
FIRST_NAME VARCHAR2 (25)
SALARY NUMBER(6)

You need to create a report to display the salaries of all employees. Which script should you use to display the salaries in format: "$45,000.00"?
Mark for Review
(1) Points

SELECT TO_CHAR(salary, '$999,999')
FROM employees;

SELECT TO_NUM(salary, '$999,990.99')
FROM employees;

SELECT TO_NUM(salary, '$999,999.00')
FROM employees;

SELECT TO_CHAR(salary, '$999,999.00')
FROM employees;
(*)

Incorrect. Refer to Section 2

21. If you use the RR format when writing a query using the date 27-OCT-17 and the year is 2001, what year would be the result? Mark for Review
(1) Points

2001

1901

2017 (*)

1917

Correct

22. Which of the following General Functions will return the first non-null expression in the expression list? Mark for Review
(1) Points

NVL

NVL2

NULLIF

COALESCE (*)

Correct

23. When executed, which statement displays a zero if the TUITION_BALANCE value is zero and the HOUSING_BALANCE value is null? Mark for Review
(1) Points

SELECT NVL (tuition_balance + housing_balance, 0) "Balance Due"
FROM student_accounts;
(*)

SELECT NVL(tuition_balance, 0), NVL (housing_balance), tuition_balance + housing_balance "Balance Due"
FROM student_accounts;

SELECT tuition_balance + housing_balance
FROM student_accounts;

SELECT TO_NUMBER(tuition_balance, 0), TO_NUMBER (housing_balance, 0), tutition_balance + housing_balance "Balance Due"
FROM student_accounts;

Incorrect. Refer to Section 2

24. Which statement about group functions is true? Mark for Review
(1) Points

NVL and NVL2, but not COALESCE, can be used with group functions to replace null values.

NVL and COALESCE, but not NVL2, can be used with group functions to replace null values.

NVL, NVL2, and COALESCE can be used with group functions to replace null values. (*)

COALESCE, but not NVL and NVL2, can be used with group functions to replace null values.

Correct

25. When joining 3 tables in a SELECT statement, how many join conditions are needed in the WHERE clause? Mark for Review
(1) Points

0

1

2 (*)

3

Correct

26. You need to create a report that lists all employees in the Sales department who do not earn $25,000 per year. Which query should you issue to accomplish this task? Mark for Review
(1) Points

SELECT last_name, first_name, salary
FROM employees
WHERE salary > 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary = 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary <= 25000 AND dept_id = 10;

SELECT last_name, first_name, salary
FROM employees
WHERE salary != 25000 AND dept_id = 10;
(*)

Correct

27. The CUSTOMERS and SALES tables contain these columns:
CUSTOMERS
CUST_ID NUMBER(10) PRIMARY KEY
COMPANY VARCHAR2(30)
LOCATION VARCHAR2(20)

SALES
SALES_ID NUMBER(5) PRIMARY KEY
CUST_ID NUMBER(10) FOREIGN KEY
TOTAL_SALES NUMBER(30)

Which SELECT statement will return the customer ID, the company and the total sales?

Mark for Review
(1) Points

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id (+);

SELECT cust_id, company, total_sales
FROM customers, sales
WHERE cust_id = cust_id;

SELECT c.cust_id, c.company, s.total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;
(*)

SELECT cust_id, company, total_sales
FROM customers c, sales s
WHERE c.cust_id = s.cust_id;

Correct

28. Your have two tables named EMPLOYEES and SALES. You want to identify the sales representatives who have generated at least $100,000 in revenue.
Which query should you issue? Mark for Review
(1) Points

SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;

SELECT e.fname, e.lname, s.sales
FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue >= 100000;
(*)

SELECT e.fname, e.lname, s.sales
FROM employees, sales
WHERE e.emp_id = s.emp_id AND revenue >= 100000;

SELECT fname, lname, sales
Q FROM employees e, sales s
WHERE e.emp_id = s.emp_id AND revenue > 100000;

Correct

29. What happens when you create a Cartesian product? Mark for Review
(1) Points

All rows from one table are joined to all rows of another table (*)

The table is joined to itself, one column to the next column, exhausting all possibilities

The table is joined to another equal table

All rows that do not match in the WHERE clause are displayed

Incorrect. Refer to Section

30. Which statement about the join syntax of a SELECT statement is true? Mark for Review
(1) Points

The ON keyword must be included.

The JOIN keyword must be included.

The FROM clause represents the join criteria.

The WHERE clause represents the join criteria. (*)

Incorrect. Refer to Section 3

31. Which statement about outer joins is true? Mark for Review
(1) Points

The tables must be aliased.

The FULL, RIGHT, or LEFT keyword must be included.

The OR operator cannot be used to link outer join conditions. (*)

Outer joins are always evaluated before other types of joins in the query.

Correct

32. Evaluate this SELECT statement:

```
SELECT p.player_id, m.last_name, m.first_name, t.team_name
FROM player p
LEFT OUTER JOIN player m ON (p.manager_id = m.player_id)
LEFT OUTER JOIN team t ON (p.team_id = t.team_id);
```

Which join is evaluated first?
Mark for Review
(1) Points

the self-join of the player table (*)

the join between the player table and the team table on TEAM_ID

the join between the player table and the team table on MANAGER_ID

the join between the player table and the team table on PLAYER_ID

Correct

33. Which two operators can be used in an outer join condition using the outer join operator (+)? Mark for Review
(1) Points

AND and = (*)

OR and =

BETWEEN...AND... and IN

IN and =

Incorrect. Refer to Section 3

34. Which statement about a natural join is true? Mark for Review
(1) Points

Columns with the same names must have identical data types.

Columns with the same names must have the same precision and datatype. (*)

Columns with the same names must have compatible data types.

Columns with the same names cannot be included in the SELECT list of the query.

Incorrect. Refer to Section 4

35. You need to join all the rows in the EMPLOYEE table to all the rows in the EMP_REFERENCE table. Which type of join should you create? Mark for Review
(1) Points

An equijoin

A cross join (*)

An inner join

A full outer join

Incorrect. Refer to Section 4

36. Which of the following best describes a natural join? Mark for Review
(1) Points

A join between two tables that includes columns that share the same name, datatypes and lengths (*)

A join that produces a Cartesian product

A join between tables where matching fields do not exist

A join that uses only one table

Correct

37. Which SELECT clause creates an equijoin by specifying a column name common to both tables? Mark for Review
(1) Points

A HAVING clause

The FROM clause

The SELECT clause

A USING clause (*)

Correct

38. Which of the following statements is the simplest description of a nonequijoin?
Mark for Review
(1) Points

A join condition containing something other than an equality operator (*)

A join condition that is not equal to other joins.

A join condition that includes the (+) on the left hand side.

A join that joins a table to itself

Incorrect. Refer to Section 4

39. You created the CUSTOMERS and ORDERS tables by issuing these CREATE TABLE statements in sequence:

```
CREATE TABLE customers
(custid varchar2(5),
companyname varchar2(30),
contactname varchar2(30),
address varchar2(30),
city varchar2(20),
state varchar2(30),
phone varchar2(20),
constraint pk_customers_01 primary key (custid));

CREATE TABLE orders
(orderid varchar2(5) constraint pk_orders_01 primary key,
orderdate date,
total number(15),
custid varchar2(5) references customers (custid));
```

You have been instructed to compile a report to present the information about orders placed by customers who reside in Nashville . Which query should you issue to achieve the desired results?
Mark for Review
(1) Points

SELECT custid, companyname

```
FROM customers
WHERE city = 'Nashville';
```

```
   SELECT orderid, orderdate, total
FROM orders o
NATURAL JOIN customers c ON o.custid = c.custid
WHERE city = 'Nashville';
```

```
   SELECT orderid, orderdate, total
FROM orders o
JOIN customers c ON o.custid = c.custid
WHERE city = 'Nashville';
(*)
```

```
   SELECT orderid, orderdate, total
FROM orders
WHERE city = 'Nashville';
```

Correct

40. Below find the structure of the CUSTOMERS and SALES_ORDER tables:

CUSTOMERS
CUSTOMER_ID NUMBER NOT NULL, Primary Key
CUSTOMER_NAME VARCHAR2 (30)
CONTACT_NAME VARCHAR2 (30)
CONTACT_TITLE VARCHAR2 (20)
ADDRESS VARCHAR2 (30)
CITY VARCHAR2 (25)
REGION VARCHAR2 (10)
POSTAL_CODE VARCHAR2 (20)
COUNTRY_ID NUMBER Foreign key to COUNTRY_ID column of the COUNTRY table
PHONE VARCHAR2 (20)
FAX VARCHAR2 (20)
CREDIT_LIMIT NUMBER(7,2)

SALES_ORDER
ORDER_ID NUMBER NOT NULL, Primary Key
CUSTOMER_ID NUMBER Foreign key to CUSTOMER_ID column of the CUSTOMER table
ORDER_DT DATE
ORDER_AMT NUMBER (7,2)
SHIP_METHOD VARCHAR2 (5)

You need to create a report that displays customers without a sales order. Which statement could you use?
Mark for Review
(1) Points

SELECT c.customer_name
FROM customers c
WHERE c.customer_id not in (SELECT s.customer_id FROM sales_order s);
(*)

SELECT c.customer_name
FROM customers c, sales_order s
WHERE c.customer_id = s.customer_id(+);

SELECT c.customer_name
FROM customers c, sales_order s
WHERE c.customer_id (+) = s.customer_id;

SELECT c.customer_name
FROM customers c
RIGHT OUTER JOIN sales_order s ON (c.customer_id = s.customer_id);

Incorrect. Refer to Section 4

41. Which query will retrieve all the rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table? Mark for Review
(1) Points

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
RIGHT OUTER JOIN departments d ON (e.department_id = d.department_id);

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
NATURAL JOIN departments d;

SELECT e.last_name, e.department_id, d.department_name
FROM employees e
LEFT OUTER JOIN departments d ON (e.department_id = d.department_id);
(*)

```
SELECT e.last_name, e.department_id, d.department_name
FROM employees e
JOIN departments d USING (e.department_id = d.department_id);
```

Incorrect. Refer to Section 4

42. Which two sets of join keywords create a join that will include unmatched rows from the first table specified in the SELECT statement? Mark for Review
(1) Points

LEFT OUTER JOIN and FULL OUTER JOIN (*)

RIGHT OUTER JOIN and LEFT OUTER JOIN

USING and HAVING

OUTER JOIN and USING

Incorrect. Refer to Section 4

43. What should be included in a SELECT statement to return NULL values from all tables? Mark for Review
(1) Points

natural joins

left outer joins

full outer joins (*)

right outer joins

Incorrect. Refer to Section 4

44. If a select list contains both a column as well as a group function then what clause is required? Mark for Review
(1) Points

having clause

join clause

order by clause

group by clause (*)

Incorrect. Refer to Section 5

45. Evaluate this SELECT statement:
SELECT MAX(salary), dept_id
FROM employee
GROUP BY dept_id;

Which values are displayed?
Mark for Review
(1) Points

The highest salary for all employees.

The highest salary in each department. (*)

The employees with the highest salaries.

The employee with the highest salary for each department.

Incorrect. Refer to Section 5

46. Which statement about group functions is true? Mark for Review
(1) Points

Group functions ignore null values. (*)

Group functions can only be used in a SELECT list.

Group functions can be used in a WHERE clause.

A query that includes a group function in the SELECT list must include a GROUP BY clause.

Incorrect. Refer to Section 5

47. What is the best explanation as to why this SQL statement will NOT execute?
SELECT department_id "Department", AVG (salary)"Average"
FROM employees
GROUP BY Department;
Mark for Review
(1) Points

Salaries cannot be averaged as not all the numbers will divide evenly.

You cannot use a column alias in the GROUP BY clause. (*)

The GROUP BY clause must have something to GROUP.

The department id is not listed in the departments table.

Incorrect. Refer to Section 5

48. The AVG, SUM, VARIANCE, and STDDEV functions can be used with which of the following? Mark for Review
(1) Points

Only numeric data types (*)

Integers only

Any data type

All except numeric

Correct

49. Examine the data in the PAYMENT table:
PAYMENT_ID CUSTOMER_ID PAYMENT_DATE PAYMENT_TYPE PAYMENT_AMOUNT
86590586 8908090 10-JUN-03 BASIC 859.00
89453485 8549038 15-FEB-03 INTEREST 596.00
85490345 5489304 20-MAR-03 BASIC 568.00

You need to determine the average payment amount made by each customer in January, February and March of 2003. Which SELECT statement should you use?
Mark for Review
(1) Points

SELECT AVG(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' AND '31-MAR-2003';
(*)

SELECT AVG(payment_amount)
FROM payment;

SELECT SUM(payment_amount)
FROM payment
WHERE payment_date BETWEEN '01-JAN-2003' and '31-MAR-2003';

```
   SELECT AVG(payment_amount)
FROM payment
WHERE TO_CHAR(payment_date) IN (JAN, FEB, MAR);
```

Correct

50. You need to calculate the standard deviation for the cost of products produced in the Birmingham facility. Which group function will you use? Mark for Review
(1) Points

STDEV

STDDEV (*)

VAR_SAMP

VARIANCE

Incorrect. Refer to Section 5

51. The VENDORS table contains these columns:
VENDOR_ID NUMBER Primary Key
NAME VARCHAR2(30)
LOCATION_ID NUMBER
ORDER_DT DATE
ORDER_AMOUNT NUMBER(8,2)

Which two clauses represent valid uses of aggregate functions for this table?
Mark for Review
(1) Points

(Choose all correct answers)

FROM MAX(order_dt)

SELECT SUM(order_dt)

SELECT SUM(order_amount) (*)

WHERE MAX(order_dt) = order_dt

SELECT location_id, MIN(AVG(order_amount)) (*)

Incorrect. Refer to Section 5

52. Which group function would you use to display the lowest value in the SALES_AMOUNT column? Mark for Review
(1) Points

AVG

COUNT

MAX

MIN (*)

Incorrect. Refer to Section 5

53. You need to calculate the average salary of employees in each department. Which group function will you use? Mark for Review
(1) Points

AVG (*)

MEAN

MEDIAN

AVERAGE

Correct

54. Which group functions below act on character, number and date data types? (Choose more than one answer) Mark for Review
(1) Points

(Choose all correct answers)

SUM

MAX (*)

MIN (*)

AVG

COUNT (*)

Correct

55. The PRODUCTS table contains these columns:
PROD_ID NUMBER(4)
PROD_NAME VARCHAR2(30)
PROD_CAT VARCHAR2(30)
PROD_PRICE NUMBER(3)
PROD_QTY NUMBER(4)

The following statement is issued:

```
SELECT AVG(prod_price, prod_qty)
FROM products;
```

What happens when this statement is issued?
Mark for Review
(1) Points

Both the average price and the average quantity of the products are returned.

Only the average quantity of the products is returned.

The values in the PROD_PRICE column and the PROD_QTY column are averaged together.

An error occurs. (*)

Incorrect. Refer to Section 5

56. The STYLES table contains this data:

STYLE_ID	STYLE_NAME	CATEGORY	COST
895840	SANDAL	85940	12.00
968950	SANDAL	85909	10.00
869506	SANDAL	89690	15.00
809090	LOAFER	89098	10.00
890890	LOAFER	89789	14.00
857689	HEEL	85940	11.00
758960	SANDAL	86979	

You issue this SELECT statement:

```
SELECT COUNT(category)
FROM styles;
```

Which value is displayed?
Mark for Review
(1) Points

0

6

7 (*)

The statement will NOT execute successfully.

Incorrect. Refer to Section 5

57. Examine the data from the LINE_ITEM table:

LINE_ITEM_ID	ORDER_ID	PRODUCT_ID	PRICE	DISCOUNT
890898	847589	848399	8.99	0.10
768385	862459	849869	5.60	0.05
867950	985490	945809	5.60	
954039	439203	438925	5.25	0.15
543949	349302	453235	4.50	

You query the LINE_ITEM table and a value of 5 is returned. Which SQL statement did you execute?
Mark for Review
(1) Points

SELECT COUNT(discount) FROM line_item;

SELECT COUNT(*) FROM line_item; (*)

SELECT SUM(discount) FROM line_item;

SELECT AVG(discount) FROM line_item;

Incorrect. Refer to Section 5

58. Group functions can avoid computations involving duplicate values by including which keyword? Mark for Review
(1) Points

NULL

DISTINCT (*)

SELECT

UNLIKE

Incorrect. Refer to Section 5

59. Evaluate this SELECT statement:
SELECT COUNT(*)
FROM products;

Which statement is true?
Mark for Review
(1) Points

The number of rows in the table is displayed. (*)

The number of unique PRODUCT_IDs in the table is displayed.

An error occurs due to an error in the SELECT clause.

An error occurs because no WHERE clause is included in the SELECT statement.

Incorrect. Refer to Section 5

60. The PLAYERS table contains these columns:
PLAYER_ID NUMBER PK
PLAYER_NAME VARCHAR2 (30)
TEAM_ID NUMBER
HIRE_DATE DATE
SALARY NUMBER (8,2)

Which two clauses represent valid uses of aggregate functions? (Choose three.)
Mark for Review
(1) Points

(Choose all correct answers)

ORDER BY AVG(salary)

GROUP BY MAX(salary) (*)

SELECT AVG(NVL(salary, 0)) (*)

HAVING MAX(salary) > 10000 (*)

WHERE hire_date > AVG(hire_date)

Incorrect. Refer to Section 6

61. The MANUFACTURER table contains these columns:
MANUFACTURER_ID NUMBER
MANUFACTURER_NAME VARCHAR2(30)
TYPE VARCHAR2(25)
LOCATION_ID NUMBER

You need to display the number of unique types of manufacturers at each location. Which SELECT statement should you use?
Mark for Review
(1) Points

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY location_id;
(*)

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer;

SELECT location_id, COUNT(type)
FROM manufacturer
GROUP BY location_id;

SELECT location_id, COUNT(DISTINCT type)
FROM manufacturer
GROUP BY type;

Correct

62. What is the correct order of clauses in a SELECT statement? Mark for Review
(1) Points

SELECT
FROM
WHERE
ORDER BY
HAVING

SELECT
FROM
HAVING
GROUP BY
WHERE
ORDER BY

SELECT
FROM
WHERE

GROUP BY
HAVING
ORDER BY
(*)

SELECT
FROM
WHERE
HAVING
ORDER BY
GROUP BY

Correct

63. The PRODUCTS table contains these columns:
PROD_ID NUMBER(4)
PROD_NAME VARCHAR(20)
PROD_CAT VARCHAR2(15)
PROD_PRICE NUMBER(5)
PROD_QTY NUMBER(4)

You need to identify the minimum product price in each product category.
Which statement could you use to accomplish this task?
Mark for Review
(1) Points

SELECT prod_cat, MIN (prod_price)
FROM products
GROUP BY prod_price;

SELECT prod_cat, MIN (prod_price)
FROM products
GROUP BY prod_cat;
(*)

SELECT MIN (prod_price), prod_cat
FROM products
GROUP BY MIN (prod_price), prod_cat;

SELECT prod_price, MIN (prod_cat)
FROM products
GROUP BY prod_cat;

Correct

64. The EMPLOYEES table contains these columns:
ID_NUMBER NUMBER Primary Key
NAME VARCHAR2 (30)
DEPARTMENT_ID NUMBER
SALARY NUMBER (7,2)
HIRE_DATE DATE

Evaluate this SQL statement:

```
SELECT id_number, name, department_id, SUM(salary)
FROM employees
WHERE salary > 25000
GROUP BY department_id, id_number, name
ORDER BY hire_date;
```

Why will this statement cause an error?
Mark for Review
(1) Points

The HAVING clause is missing.

The WHERE clause contains a syntax error.

The SALARY column is NOT included in the GROUP BY clause.

The HIRE_DATE column is NOT included in the GROUP BY clause. (*)

Correct

65. Evaluate this SELECT statement:

```
SELECT SUM(salary), dept_id, department_name
FROM employee
WHERE dept_id = 1
GROUP BY department;
```

Which clause of the SELECT statement contains a syntax error?
Mark for Review
(1) Points

SELECT

FROM

WHERE

GROUP BY (*)

Incorrect. Refer to Section

66. The PLAYERS and TEAMS tables contain these columns:
PLAYERS
PLAYER_ID NUMBER NOT NULL, Primary Key
LAST_NAME VARCHAR2 (30) NOT NULL
FIRST_NAME VARCHAR2 (25) NOT NULL
TEAM_ID NUMBER
POSITION VARCHAR2 (25)

TEAMS
TEAM_ID NUMBER NOT NULL, Primary Key
TEAM_NAME VARCHAR2 (25)

You need to create a report that lists the names of each team with more than five pitchers.
Which SELECT statement will produce the desired result?
Mark for Review
(1) Points

```
SELECT t.team_name, COUNT(p.player_id)
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name;
```

```
SELECT t.team_name, COUNT(p.player_id)
FROM players JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER' HAVING COUNT(p.player_id) > 5;
```

```
SELECT t.team_name, COUNT(p.player_id)
FROM players p, teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;
```

```
SELECT t.team_name, COUNT(p.player_id)
FROM players p JOIN teams t ON (p.team_id = t.team_id)
WHERE UPPER(p.position) = 'PITCHER'
GROUP BY t.team_name HAVING COUNT(p.player_id) > 5;
```

(*)

Incorrect. Refer to Section 6

67. Which statement about the GROUP BY clause is true? Mark for Review

(1) Points

To exclude rows before dividing them into groups using the GROUP BY clause, you use should a WHERE clause. (*)

You can use a column alias in a GROUP BY clause.

By default, rows are not sorted when a GROUP BY clause is used.

You must use the HAVING clause with the GROUP BY clause.

Incorrect. Refer to Section 6

68. Using a subquery in which clause will return a syntax error? Mark for Review
(1) Points

WHERE

FROM

HAVING

There are no places you cannot place subqueries. (*)

Incorrect. Refer to Section 6

69. Which of the following is TRUE regarding the order of subquery execution? Mark for Review
(1) Points

The outer query is executed first

The subquery executes once after the main query

The subquery executes once before the main query (*)

The result of the main query is used with the subquery

Correct

70. The TEACHERS and CLASS_ASSIGNMENTS tables contain these columns:
TEACHERS
TEACHER_ID NUMBER(5) Primary Key
NAME VARCHAR2 (25)
SUBJECT_ID NUMBER(5)

CLASS_ASSIGNMENTS
CLASS_ID NUMBER (5) Primary Key
TEACHER_ID NUMBER (5)
START_DATE DATE
MAX_CAPACITY NUMBER (3)

All MAX_CAPACITY values are greater than 10. Which two SQL statements correctly use subqueries? (Choose two.)
Mark for Review
(1) Points

(Choose all correct answers)

SELECT *
FROM class_assignments
WHERE max_capacity = (SELECT AVG(max_capacity) FROM class_assignments);
(*)

SELECT *
FROM teachers
WHERE teacher_id = (SELECT teacher_id FROM class_assignments WHERE class_id = 45963);
(*)

SELECT *
FROM teachers
WHERE teacher_id = (SELECT teacher_id FROM class_assignments WHERE max_capacity > 0);

SELECT *
FROM teachers
WHERE teacher_id LIKE (SELECT teacher_id FROM class_assignments WHERE max_capacity > 0);

SELECT *
FROM class_assignments
WHERE max_capacity = (SELECT AVG(max_capacity) FROM class_assignments GROUP BY teacher_id);

Incorrect. Refer to Section 6

71. The EMPLOYEES and ORDERS tables contain these columns:
EMPLOYEES

EMP_ID NUMBER(10) NOT NULL PRIMARY KEY
FNAME VARCHAR2(30)
LNAME VARCHAR2(30)
ADDRESS VARCHAR2(25)
CITY VARCHAR2(20)
STATE VARCHAR2(2)
ZIP NUMBER(9)
TELEPHONE NUMBER(10)

ORDERS
ORDER_ID NUMBER(10) NOT NULL PRIMARY KEY
EMP_ID NUMBER(10) NOT NULL FOREIGN KEY
ORDER_DATE DATE
TOTAL NUMBER(10)

Which SELECT statement will return all orders generated by a sales representative named Franklin during the year 2001?
Mark for Review
(1) Points

SELECT order_id, total
FROM ORDERS (SELECT emp_id FROM employees WHERE lname = 'Franklin')
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01';

SELECT (SELECT emp_id FROM employees WHERE lname = 'Franklin') AND order_id, total
FROM ORDERS
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01';

SELECT order_id, emp_id, total
FROM ORDERS
WHERE order_date BETWEEN '01-jan-01' AND '31-dec-01' AND emp_id = 'Franklin';

SELECT order_id, total
FROM ORDERS
WHERE emp_id = (SELECT emp_id FROM employees WHERE lname = 'Franklin')
AND order_date BETWEEN '01-jan-01' AND '31-dec-01';
(*)

Correct

72. Examine the structures of the CUSTOMER and ORDER_HISTORY tables:
CUSTOMER
CUSTOMER_ID NUMBER(5)

NAME VARCHAR2(25)
CREDIT_LIMIT NUMBER(8,2)
OPEN_DATE DATE

ORDER_HISTORY
ORDER_ID NUMBER(5)
CUSTOMER_ID NUMBER(5)
ORDER_DATE DATE
TOTAL NUMBER(8,2)

Which of the following scenarios would require a subquery to return the desired results?
Mark for Review
(1) Points

You need to display the date each customer account was opened.

You need to display each date that a customer placed an order.

You need to display all the orders that were placed on a certain date.

You need to display all the orders that were placed on the same day as order number 25950. (*)

Incorrect. Refer to Section 6

73. You need to produce a report that contains all employee-related information for those employees who have Brad Carter as a supervisor. However, you are not sure which supervisor ID belongs to Brad Carter. Which query should you issue to accomplish this task? Mark for Review
(1) Points

```
SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');
```

```
SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT supervisor_id
    FROM employees
    WHERE last_name = 'Carter');
```

```
   SELECT *
FROM supervisors
WHERE supervisor_id =
    (SELECT employee_id
    FROM supervisors
    WHERE last_name = 'Carter');


   SELECT *
FROM employees
WHERE supervisor_id =
    (SELECT employee_id
    FROM employees
    WHERE last_name = 'Carter');
```

(*)

Incorrect. Refer to Section 6

74. If a single-row subquery returns a null value and uses the equality comparison operator, what will the outer query return? Mark for Review
(1) Points

no rows (*)

all the rows in the table

a null value

an error

Incorrect. Refer to Section 6

75. Which best describes a single-row subquery? Mark for Review
(1) Points

a query that returns only one row from the inner SELECT statement (*)

a query that returns one or more rows from the inner SELECT statement

a query that returns only one column value from the inner SELECT statement

a query that returns one or more column values from the inner SELECT statement

Incorrect. Refer to Section 6

76. Which best describes a multiple-row subquery? Mark for Review
(1) Points

A query that returns only one row from the inner SELECT statement

A query that returns one or more rows from the inner SELECT statement (*)

A query that returns only one column value from the inner SELECT statement

A query that returns one or more column values from the inner SELECT statement

Incorrect. Refer to Section 6

77. Which of the following statements contains a comparison operator that is used to restrict rows based on a list of values returned from an inner query? Mark for Review
(1) Points

```
SELECT description
FROM d_types
WHERE code IN (SELECT type_code FROM d_songs);
```

```
SELECT description
FROM d_types
WHERE code = ANY (SELECT type_code FROM d_songs);
```

```
SELECT description
FROM d_types
WHERE code <> ALL (SELECT type_code FROM d_songs);
```

All of the above. (*)

Incorrect. Refer to Section 6

78. Evaluate this SELECT statement:

```
SELECT customer_id, name
FROM customer
WHERE customer_id IN
  (SELECT customer_id
   FROM customer
   WHERE state_id = 'GA' AND credit_limit > 500.00);
```

What would happen if the inner query returned null?
Mark for Review
(1) Points

An error would be returned.

No rows would be returned by the outer query. (*)

All the rows in the table would be selected.

Only the rows with CUSTOMER_ID values equal to null would be selected.

Incorrect. Refer to Section 6

79. You need to create a SELECT statement that contains a multiple-row subquery, which comparison operator(s) can you use? Mark for Review
(1) Points

IN, ANY, and ALL (*)

LIKE

BETWEEN...AND...

=, <, and >

Incorrect. Refer to Section 6

80. Which of the following best describes the meaning of the ANY operator? Mark for Review
(1) Points

Equal to any member in the list

Compare value to each value returned by the subquery (*)

Compare value to every value returned by the subquery

Equal to each value in the list

Correct

81. Which operator or keyword cannot be used with a multiple-row subquery? Mark for Review
(1) Points

ALL

ANY

= (*)

>

Incorrect. Refer

82. What would happen if you attempted to use a single-row operator with a multiple-row subquery? Mark for Review
(1) Points

An error would be returned. (*)

No rows will be selected.

All the rows will be selected.

The data returned may or may not be correct.

Incorrect. Refer to Section 6

83. Evaluate this SQL statement:

```
SELECT employee_id, last_name, salary
FROM employees
WHERE department_id IN
  (SELECT department_id
   FROM employees
   WHERE salary > 30000 AND salary < 50000);
```

Which values will be displayed?
Mark for Review
(1) Points

Only employees who earn more than $30,000.

Only employees who earn less than $50,000.

All employees who work in a department with employees who earn more than $30,000 and more than $50,000.

All employees who work in a department with employees who earn more than $30,000, but less than $50,000. (*)

Correct

84. Examine the data in the PAYMENT table:

PAYMENT_ID	CUSTOMER_ID	PAYMENT_DATE	PAYMENT_TYPE	PAYMENT_AMOUNT
86590586	8908090	10-JUN-03	BASIC	859.00

89453485 8549038 15-FEB-03 INTEREST 596.00
85490345 5489304 20-MAR-03 BASIC 568.00

This statement fails when executed:

```
SELECT customer_id, payment_type
FROM payment
WHERE payment_id =
  (SELECT payment_id
   FROM payment
   WHERE payment_amount = 596.00 OR payment_date = '20-MAR-2003');
```

Which change could correct the problem?
Mark for Review
(1) Points

Change the outer query WHERE clause to 'WHERE payment_id IN'. (*)

Remove the quotes surrounding the date value in the OR clause.

Remove the parentheses surrounding the nested SELECT statement.

Change the comparison operator to a single-row operator.

Incorrect. Refer to Section 6

85. What is wrong with the following query?

```
SELECT employee_id, last_name
FROM employees
WHERE salary =
  (SELECT MIN(salary) FROM employees GROUP BY department_id);
```

Mark for Review
(1) Points

Single rows contain multiple values and a logical operator is used.

Subquery returns more than one row and single row comparison operator is used. (*)

Subquery references the wrong table in the WHERE clause.

Nothing, it will run without problems.

Incorrect. Refer to Section 6

86. Examine the data in the PAYMENT table:
PAYMENT_ID CUSTOMER_ID PAYMENT_DATE PAYMENT_TYPE PAYMENT_AMOUNT
86590586 8908090 10-JUN-03 BASIC 859.00
89453485 8549038 15-FEB-03 INTEREST 596.00
85490345 5489304 20-MAR-03 BASIC 568.00

This statement fails when executed:

```
SELECT payment_date, customer_id, payment_amount
FROM payment
WHERE payment_id =
  (SELECT payment_id
   FROM payment
   WHERE payment_date >= '05-JAN-2002' OR payment_amount > 500.00);
```

Which change could correct the problem?
Mark for Review
(1) Points

Remove the subquery WHERE clause.

Change the outer query WHERE clause to 'WHERE payment_id IN'. (*)

Include the PAYMENT_ID column in the select list of the outer query.

Remove the single quotes around the date value in the inner query WHERE clause.

Incorrect. Refer to Section 6

87. Assume all the column names are correct. The following SQL statement will execute which of the following?

```
INSERT INTO departments (department_id, department_name, manager_id,
location_id)
VALUES (70, 'Public Relations', 100, 1700);
```

Mark for Review
(1) Points

100 will be inserted into the department_id column

1700 will be inserted into the manager_id column

70 will be inserted into the department_id column (*)

'Public Relations' will be inserted into the manager_name column

Incorrect. Refer to Section 7

88. You need to add a row to an existing table. Which DML statement should you use? Mark for Review
(1) Points

UPDATE

INSERT (*)

DELETE

CREATE

Incorrect. Refer

89. The PRODUCTS table contains these columns:
PRODUCT_ID NUMBER NOT NULL
PRODUCT_NAME VARCHAR2 (25)
SUPPLIER_ID NUMBER NOT NULL
LIST_PRICE NUMBER (7,2)
COST NUMBER (5,2)
QTY_IN_STOCK NUMBER(4)
LAST_ORDER_DT DATE NOT NULL DEFAULT SYSDATE

Which INSERT statement will execute successfully?
Mark for Review
(1) Points

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, 700); (*)

INSERT INTO products VALUES (2958, 'Cable', 8690, 7.09, 4.04, SYSDATE);

INSERT INTO products(product_id, product_name) VALUES (2958, 'Cable');

INSERT INTO products(product_id, product_name, supplier_id VALUES (2958, 'Cable', 8690, SYSDATE);

Incorrect. Refer to Section 7

90. You need to copy rows from the EMPLOYEE table to the EMPLOYEE_HIST table. What could you use in the INSERT statement to accomplish this task? Mark for Review
(1) Points

an ON clause

a SET clause

a subquery (*)

a function

Correct

91. One of the sales representatives, Janet Roper, has informed you that she was recently married, and she has requested that you update her name in the employee database. Her new last name is Cooper. Janet is the only person with the last name of Roper that is employed by the company. The EMPLOYEES table contains these columns and all data is stored in lowercase:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2 (20)
HIRE_DATE DATE
SALARY NUMBER(10)

Which UPDATE statement will accomplish your objective?
Mark for Review
(1) Points

UPDATE employees
SET lname = 'cooper'
WHERE lname = 'roper';
(*)

UPDATE employees lname = 'cooper'
WHERE lname = 'roper';

UPDATE employees
SET lname = 'roper'
WHERE lname = 'cooper';

UPDATE employees
SET cooper = 'lname'
WHERE lname = 'roper';

Incorrect. Refer to Section 7

92. You need to remove a row from the EMPLOYEE table. Which statement would you use? Mark for Review
(1) Points

UPDATE with a WHERE clause

INSERT with a WHERE clause

DELETE with a WHERE clause (*)

MERGE with a WHERE clause

Correct

93. Examine the structures of the PLAYERS, MANAGERS, and TEAMS tables:
PLAYERS
PLAYER_ID NUMBER Primary Key
LAST_NAME VARCHAR2 (30)
FIRST_NAME VARCHAR2 (25)
TEAM_ID NUMBER
MGR_ID NUMBER
SIGNING_BONUS NUMBER(9,2)
SALARY NUMBER(9,2)

MANAGERS
MANAGER_ID NUMBER Primary Key
LAST_NAME VARCHAR2 (20)
FIRST_NAME VARCHAR2 (20)
TEAM_ID NUMBER

TEAMS
TEAM_ID NUMBER Primary Key
TEAM_NAME VARCHAR2 (20)
OWNER_LAST_NAME VARCHAR2 (20)
OWNER_FIRST_NAME VARCHAR2 (20)

Which situation would require a subquery to return the desired result?
Mark for Review
(1) Points

To display the names each player on the Lions team

To display the maximum and minimum player salary for each team

To display the names of the managers for all the teams owned by a given owner (*)

To display each player, their manager, and their team name for all teams with a id value greater than 5000

Correct

94. The EMPLOYEES table contains the following columns:
EMP_ID NUMBER(10) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
DEPT VARCHAR2(20)
HIRE_DATE DATE
SALARY NUMBER(9,2)
BONUS NUMBER(9,2)

You want to execute one DML statement to change the salary of all employees in department 10 to equal the new salary of employee number 89898. Currently, all employees in department 10 have the same salary value. Which statement should you execute?
Mark for Review
(1) Points

UPDATE employee
SET salary = SELECT salary
FROM employee
WHERE emp_id = 89898;

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898);

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898)
WHERE dept = 10;
(*)

UPDATE employee
SET salary = (SELECT salary FROM employee WHERE emp_id = 89898 AND dept = 10);

Incorrect. Refer to Section 7

95. Evaluate this statement: DELETE FROM customer; Which statement is true?
Mark for Review
(1) Points

The statement deletes all the rows from the CUSTOMER table. (*)

The statement deletes the CUSTOMER column.

The statement deletes the first row in the CUSTOMERS table.

The statement removes the structure of the CUSTOMER table from the database.

Incorrect. Refer to Section 7

96. When the WHERE clause is missing in a DELETE statement, what is the result?
Mark for Review
(1) Points

All rows are deleted from the table. (*)

The table is removed from the database.

An error message is displayed indicating incorrect syntax.

Nothing. The statement will not execute.

Correct

97. The PLAYERS table contains these columns:
PLAYER_ID NUMBER NOT NULL
PLAYER_LNAME VARCHAR2(20) NOT NULL
PLAYER_FNAME VARCHAR2(10) NOT NULL
TEAM_ID NUMBER
SALARY NUMBER(9,2)

You need to increase the salary of each player for all players on the Tiger team by 12.5 percent. The TEAM_ID value for the Tiger team is 5960. Which statement should you use?
Mark for Review
(1) Points

UPDATE players (salary) SET salary = salary * 1.125;

UPDATE players SET salary = salary * .125 WHERE team_id = 5960;

UPDATE players SET salary = salary * 1.125 WHERE team_id = 5960; (*)

UPDATE players (salary) VALUES(salary * 1.125) WHERE team_id = 5960;

Correct

98. You need to delete a record in the EMPLOYEES table for Tim Jones, whose unique employee identification number is 348. The EMPLOYEES table contains these columns:
ID_NUM NUMBER(5) PRIMARY KEY
LNAME VARCHAR2(20)
FNAME VARCHAR2(20)
ADDRESS VARCHAR2(30)
PHONE NUMBER(10)

Which DELETE statement will delete the appropriate record without deleting any additional records?
Mark for Review
(1) Points

DELETE FROM employees WHERE id_num = 348; (*)

DELETE FROM employees WHERE lname = jones;

DELETE * FROM employees WHERE id_num = 348;

DELETE 'jones' FROM employees;

Correct

99. You need to update the expiration date of products manufactured before June 30th . In which clause of the UPDATE statement will you specify this condition?
Mark for Review
(1) Points

the ON clause

the WHERE clause (*)

the SET clause

the USING clause

Correct

100. You need to update both the DEPARTMENT_ID and LOCATION_ID columns in the EMPLOYEE table using one UPDATE statement. Which clause should you include in the UPDATE statement to update multiple columns? Mark for Review
(1) Points

the USING clause

the ON clause

the WHERE clause

the SET clause (*)

Correct