

# DFO Database Foundations Final Exam

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

## Section 4

(Answer all questions in this section)

1. In Oracle SQL Data Modeler, the attribute that you assign as primary UID is automatically set to a mandatory attribute and will be engineered to a primary key in the relational model.

True (\*) ☒

False ☐

Correct

(1/1) Points

2. When building a model in Oracle SQL Data Modeler you begin in the \_\_\_\_\_ tab.

Physical ☐

Conceptual ☐

Relational ☐

Logical (\*) ☒

Correct

(1/1) Points

3. \_\_\_\_\_ Engineering is the process of creating a conceptual or logical model by extracting the information from an existing data source.

Reverse (\*) ☐

Top-Down ☐

Forward ☒

Target ☐

Incorrect. Refer to Section 4 Lesson 2.

(0/1) Points

4. \_\_\_\_\_ Engineering is the process of transforming a Logical Data Model to a Relational Model.

Target ☐

Forward (\*) ☒

Top-Down ☐

Reverse ☐

Correct

(1/1) Poin

## Section 5

(Answer all questions in this section)

5. Primary key constraints should have a suffix of PKEY.

True ☐

False (\*) ☒

Correct

(1/1) Points

## Section 5

(Answer all questions in this section)

6. To define naming templates in Oracle SQL Data Modeler:

Right click the name of the design in object browser ☐

Select properties, select template ☐

Edit the template to use abbreviations ☐

Do all of these steps. (\*) ☒

Correct

(1/1) Points

7. A column or combination of columns in one table that refers to a primary key in the same or another table.

Candidate Key ☐

Foreign Key (\*) ☒

Primary Key ☐

Super Key ☐

Correct

(1/1) Points

8. You can define naming standards in Oracle SQL Developer Data Modeler using \_\_\_\_\_.

Glossary ☐

Naming Templates ☐

Design Rule Validations ☐

All of the above can be used to define naming standards in Oracle SQL Data Modeler. (\*) ☒

Correct

(1/1) Points

## Section 6

(Answer all questions in this section)

9. To see all the fields and records in the employees table you can run the following query :

SELECT all FROM employees; ☐

SELECT columns FROM employees; ☐

SELECT \* FROM employees; (\*) ☒

SELECT # FROM employees; ☐

None of the above. ☐

Correct

(1/1) Points

10. In a basic query, following the word FROM comes the fields to be displayed.

True ☒

False (\*) ☐

Incorrect. Refer to Section 6 Lesson 1.

(0/1) Points

11. To use a computer application you must understand how it is built and how it works inside.

True ☐

False (\*) ☒

Correct

(1/1) Points

12. \_\_\_\_\_ consistency guarantees a consistent view of the data at all times.

Data ☐

Read (\*) ☒

Table ☐

Write ☐

Correct

(1/1) Points

13. \_\_\_\_\_ give you more flexibility and control when changing data, and they ensure data consistency in the event of user process failure or system failure.

Procedures ☐

Functions ☐

Code blocks ☐

Transactions (\*) ☒

Correct

(1/1) Points

14. With the \_\_\_\_\_ and ROLLBACK statements, you have control over making changes to the data permanent

INSERT ☐

DELETE ☐

COMMIT (\*) ☒

WHERE ☐

Correct

(1/1) Points

15. Users may view data that is in the process of being changed by another user.

True ☐

False (\*) ☒

Correct

(1/1) Points

16. The \_\_\_\_\_ join clause is based on all the columns in the two tables that have the same name and the same datatype.

NATURAL JOIN (\*) ☒

OUTER JOIN ☐

CROSS JOIN ☐

USING ☐

Correct

(1/1) Points

17. Which of the following statements is syntactically correct?

SELECT e.employee\_id, e.last\_name, e.department\_id, d.department\_id,  
d.location\_id

FROM employees e JOIN departments d  
ON (e.department\_id = d.department\_id)

AND e.manager\_id = 149 ; ☐

SELECT e.employee\_id, e.last\_name, e.department\_id, d.department\_id,  
d.location\_id

FROM employees e JOIN departments d  
ON (e.department\_id = d.department\_id)

WHERE e.manager\_id = 149 ; ☐

Both statements are syntactically correct. (\*) ☒

Neither statement is syntactically correct. ☐

Correct

(1/1) Points

18. What type of join is the following statement?

```
SELECT e.EMPLOYEE_ID, e.LAST_NAME, d.DEPARTMENT_ID,  
d.DEPARTMENT_NAME, d.LOCATION_ID  
FROM EMPLOYEES e, DEPARTMENTS d;
```

INNER JOIN ☐

NATURAL JOIN ☐

OUTER JOIN ☐

CROSS JOIN (\*) ☒

Correct

(1/1) Points

19. A join between two tables that returns the results of an INNER join as well as the results of a left and right join is a \_\_\_\_\_ join.

CROSS JOIN ☐

INNER OUTER ☐

TOTAL OUTER ☐

FULL OUTER (\*) ☒

Correct

(1/1) Points

20. An \_\_\_\_\_ clause creates an equijoin between two tables using one column from each table regardless of the name or data type.

CROSS JOIN ☐

ON (\*) ☐

NATURAL JOIN ☐

USING ☒

Incorrect. Refer to Section 6 Lesson 9.

(0/1) Points

21. The \_\_\_\_\_ JOIN clause produces the cross-product of two tables.

OUTER ☐

INNER ☐

CARTESIAN ☐

CROSS (\*) ☒

Correct

(1/1) Points

22. Substitution variables are used when you want to prompt for different criteria in a condition.

True (\*) ☒

False ☐

Correct

(1/1) Points

23. Which statements are not true?

(Choose 2)

(Choose all correct answers)

You can sort query results by specifying the numeric position of the column in the SELECT clause. ☐

You cannot sort query results by more than one column. (\*) ☒

You cannot use a column alias in the ORDER BY clause. (\*) ☒

You can sort by a column that is not in the SELECT list. ☐

Correct

(1/1) Points

24. Which character is used as a substitution variable in APEX?

& ☐

: (\*) ☒

;  
☐

\* ☐

Correct

(1/1) Points

25. Top-n-analysis is used when you want to retrieve only the top number of records from a result set.

True (\*) ☒

False ☐

Correct

(1/1) Points

## Section 6

(Answer all questions in this section)

26. You can link columns to other columns, arithmetic expressions, or constant values to create a character expression by using the \_\_\_\_\_ operator (||).

literal ☐

addition ☐

concatenation (\*) ☒

alias ☐

Correct

(1/1) Points

27. You can display all columns of data in a table by following the SELECT keyword with an asterisk (\*).

True (\*) ☒

False ☐

Correct

(1/1) Points

28. The DESCRIBE command describes the results of a query.

True ☐

False (\*) ☒

Correct

(1/1) Points

29. You can display selected columns of a table by listing them in the \_\_\_\_\_ clause.

IF ☐

FROM ☐

WHERE ☐

SELECT (\*) ☒

Correct

(1/1) Points

30. Which column alias is invalid?

"First Name" ☐

First Name (\*) ☐

"FIRST NAME" ☐

First\_Name ☒

Incorrect. Refer to Section 6 Lesson 6.

(0/1) Points

31. If an arithmetic expression contains more than one operator, \_\_\_\_\_ are evaluated first.

addition and subtraction ☐

exponentiation ☐

multiplication and division ☐

anything in parenthesis (\*) ☒

Correct

(1/1) Points

32. Functions of SQL are:

Inserting, updating, and deleting rows in a table ☐

Querying data stored in the database ☐

Both of the above options are functions of SQL (\*) ☒

Neither of the above options are functions of SQL ☐

Correct

(1/1) Points

33. All of the following are stages of SQL Processing except:

Row Source Generation ☐

Execution ☐

Parsing ☐

Optimization ☐

All of the above options are stages of SQL processing. (\*) ☒

Correct

(1/1) Points

34. Which software is used to manage reading and manipulating a relational database ?

DBMS software (\*) ☒

ERD software ☐

Flat file software ☐

Spreadsheet software ☐

Correct

(1/1) Points

35. A primary key must contain a value and the value must be \_\_\_\_.

null ☐

unique (\*) ☒

greater than zero ☐

blank ☐

Correct

(1/1) Points

36. You can override the default order by using parentheses around the expressions that you want to calculate first.

True (\*) ☒

False ☐

Correct



(1/1) Points

37. According to the rules of precedence which operator will be evaluated first?

AND (\*) ☒

OR ☐

Both are on the same level of precedence. ☐

Correct

(1/1) Points

38. The \_\_\_\_\_ operator requires either of the component conditions to be true.

OR (\*) ☒

BETWEEN ☐

EITHER ☐

AND ☐

Correct

(1/1) Points

39. Which operator is used to display rows based on an ordered range of values?

NOT NULL ☐

LIKE ☐

BETWEEN (\*) ☒

IN ☐

Correct

(1/1) Points

40. A logical condition combines the result of two component conditions to produce a single result based on those conditions or it inverts the result of a single condition.

True (\*) ☒

False ☐

Correct

(1/1) Points

41. The UPDATE statement modifies the values of a specific row or rows if the \_\_\_\_\_ clause is specified.

SET ☒

VALUE ☐

MODIFY ☐

WHERE (\*) ☐

Incorrect. Refer to Section 6 Lesson 4.

(0/1) Points

42. It is not mandatory to specify the column list in the INSERT statement. True or False?

True (\*) ☒

False ☐

Correct

(1/1) Points

43. \_\_\_\_\_ is used to add, modify and delete data.

Data Manipulation Language (\*) ☒

Data Control Language ☐

Data Management Language ☐

Data Definition Language ☐

Correct

(1/1) Points

44. Data Manipulation Language includes all of the following except :

UPDATE ☐

COMMIT (\*) ☒

INSERT ☐

DELETE ☐

Correct

(1/1) Points

45. The TRUNCATE statement is a data definition language (DDL) statement and generates no rollback information.

True (\*) ☒

False ☐

Correct

(1/1) Points

46. When you define a table, you can specify that a column should be given a default value by using the LITERAL option.

True ☐

False (\*) ☒

Correct

(1/1) Points

47. When you \_\_\_\_\_ a table, the database loses all the data in the table.

SELECT ☐

DROP (\*) ☒

ALTER ☐

ERASE ☐

Correct

(1/1) Points

48. The Data Definition Language performs all of the following except :

Add constraints to tables ☐

Create tables ☐

Alter tables ☐

Insert data into tables (\*) ☒

Correct

(1/1) Points

49. Columns without the NOT NULL constraint can contain null values by default.

True (\*) ☒

False ☐

Correct

(1/1) Points

50. If a table already contains rows when a column is added, the new column is initially null or takes the default value for all the rows. True or False?

True (\*) ☒

False ☐

Correct

(1/1) Points