

Test: DFO Database Foundations Final Exam

Section 4

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

Top-Down ☐

Reverse (*) ☒

Forward ☐

Target ☐

Correct

(1/1) Points

2. The steps to convert a Logical model to a Relational model using the Oracle SQL Developer Data Modeler are :

Select the Logical model, Click the Engineer to Relational Model icon, Accept defaults, Click Engineer (*) ☒

Click the Engineer to Relational Model icon, Select the Logical model, Click Engineer, Accept defaults. ☐

Select the Logical model, Accept defaults, Click the Engineer to Relational Model icon, Click Engineer ☐

None of the above. ☐

Correct

(1/1) Points

3. 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

4. Which of the following cannot be modeled using the Oracle SQL Data Modeler ?

Entities, attributes, UIDs ☐

Supertype and subtype entities ☐

Recursive Relationships ☐

Arc relationships ☐

All can be modeled. (*) ☒

Correct

(1/1) Points

Section 5

(Answer all questions in this section)

5. We can apply naming abbreviations using the .csv file containing the abbreviations

True (*) ☒

False ☐

Correct

Section 5

(Answer all questions in this section)

6. To use the Oracle SQL Developer Data Modeler to apply naming standards :

Use a .docx file constaining table names and abbreviations ☐

Use a .csv file constaining table names and abbreviations (*) ☒

Use a .accdb file constaining table names and abbreviations ☐

None of the above. ☐

Correct

(1/1) Points

7. The glossary can be used as the naming standard for your Logical Model.

True (*) ☒

False ☐

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. When altering a table, you can decrease the width of a column if ...

(Choose 3)

(Choose all correct answers)

The column contains numeric values ☐

The decrease in column width is not less than the existing values in that column (*) ☒

The table has no rows (*) ☒

The column contains only null values (*) ☒

Correct

(1/1) Points

10. _____ constraints can only be created at the column level.

Primary Key ☐

Not Null (*) ☒

Unique ☐

Check ☐

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

11. Which constraint specifies that the column (or combination of column) must contain unique value AND IS NOT NULL for all rows?

UNIQUE KEY ☐

PRIMARY KEY (*) ☒

CHECK ☐

NOT NULL ☐

Correct

(1/1) Points

12. DDL means :

Data Distribution Language ☐

Data Definers Language ☐

Data Definition Language (*) ☒

None of the above. ☐

Correct

(1/1) Points

13. To issue a CREATE TABLE statement, you must have the _____ privilege.

DISTRIBUTE TABLE ☐

CREATE TABLE (*) ☒

Both ☐

None ☐

Correct

(1/1) Points

14. A database transaction consists of the following except :

One DDL Statement ☐

One TCL Statement ☐

DML statements representing one consistent change to the data ☐

SELECT queries (*) ☒

Correct

(1/1) Points

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

Transactions (*) ☒

Code blocks ☐

Functions ☐

Procedures ☐

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

16. A transaction begins when the first DML statement is encountered and ends when one of the following occurs

A COMMIT or ROLLBACK statement is issued. ☐

A DDL statement, such as CREATE, is issued. ☐

Either of the above statements (*) ☒

None of the above ☐

Correct

(1/1) Points

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

True ☐

False (*) ☒

Correct

(1/1) Points

18. The _____ join clause is based on all the columns in the two tables that have the same name and the same datatype.

NATURAL JOIN (*) ☒

CROSS JOIN ☐

USING ☐

OUTER 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.

FULL OUTER (*) ☒

INNER OUTER ☐

CROSS JOIN ☐

TOTAL OUTER ☐

Correct

(1/1) Points

20. Will the following statement execute successfully (True or False)?

```
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);
```

True (*) ☒

False ☐

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

21. 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;
```

OUTER JOIN ☐

NATURAL JOIN ☐

INNER JOIN ☐

CROSS JOIN (*) ☒

Correct

(1/1) Points

22. 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

23. The _____ clause can be used to match columns with the same name, but different data types.

NATURAL JOIN

USING (*)

OUTER JOIN

CROSS JOIN

Correct

(1/1) Points

24. A table is the basic storage structure of an RDBMS.

True (*)

False

Correct

(1/1) Points

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

Flat file software

ERD software

Spreadsheet software

DBMS software (*)

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

26. The type of SQL Command used to modify data is :

TCL ☐

DCL ☐

DDL ☐

DML (*) ☒

Correct

(1/1) Points

27. All of the following are tools to access a relational database except :

SQL * Plus ☐

Oracle SQL Developer ☐

Oracle SQL Data Modeler (*) ☒

Oracle Application Express ☐

Correct

(1/1) Points

28. You can upload and save a SQL Script from the _____ option.

SQL Commands ☐

SQL Scripts (*) ☒

Utilities ☐

Object Browser ☐

RESTful Services ☐

Correct

(1/1) Points

29. In the APEX application a _____ is a collection of logical structures of data. A _____ is owned by a database user and has the same name as that user.

table ☐

file ☐

entity ☐

schema (*) ☒

Correct

(1/1) Points

30. The _____ clause in a query comes immediately after the SELECT and FROM.

ORDER BY ☐

IF ☐

WHERE (*) ☒

GROUP BY ☐

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

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

literal ☐

alias ☐

addition ☐

concatenation (*) ☒

Correct

(1/1) Points

32. You can display selected columns of a table by listing them in the _____ clause.

WHERE ☐

IF ☐

SELECT (*) ☒

FROM ☐

Correct

(1/1) Points

33. If an arithmetic expression contains more than one operator, _____ are evaluated first.

addition and subtraction ☐

anything in parenthesis (*) ☒

multiplication and division ☐

exponentiation ☐

Correct

(1/1) Points

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

True ☐

False (*) ☒

Correct

(1/1) Points

35. By default column aliases appear _____.

- Mixed case ☐
- Lower case ☐
- There is no default. ☐
- Upper case (*) ☒

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

36. Arithmetic expressions containing a null value evaluate to _____.

- zero ☐
- will cause an error ☐
- null (*) ☒
- whatever the calculation evaluates to ☐

Correct

(1/1) Points

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

- NOT NULL ☐
- LIKE ☐
- IN ☐
- BETWEEN (*) ☒

Correct

(1/1) Points

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

- True (*) ☒
- False ☐

Correct

(1/1) Points

39. 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

40. Which of the following is the wildcard used for any number of characters in SQL?

☐ |

☒ % (*)

☐ &

☐ #

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

41. The _____ operator requires either of the component conditions to be true.

☐ AND

☒ OR (*)

☐ BETWEEN

☐ EITHER

Correct

(1/1) Points

42. When you have constraints in place on columns, an error is returned if you try to violate the constraint rule.

☒ True (*)

☐ False

Correct

(1/1) Points

43. Any column that is not listed explicitly obtains a null value in the new row unless we have _____ values for the missing columns that are used.

☒ DEFAULT (*)

☐ STANDARD

☐ BEGINNING

☐ INSERT

Correct

(1/1) Points

44. You can delete a row that contains a primary key that is used as a foreign key in another table.

☐ True

☒ False (*)

Correct

(1/1) Points

45. When issuing a SQL DELETE command all rows in the table are deleted if you omit the _____ clause.

SELECT ☐

IF ☐

WHEN ☐

WHERE (*) ☒

Correct

(1/1) Points

Section 6

(Answer all questions in this section)

46. The UPDATE statement modifies the values of a specific row or rows if the _____ clause is specified.

WHERE (*) ☐

VALUE ☐

SET ☒

MODIFY ☐

Incorrect. Refer to Section 6 Lesson 4.

(0/1) Points

47. Which statements are not true?

(Choose 2)

(Choose all correct answers)

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

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

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

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

Correct

(1/1) Points

48. You can use _____ to temporarily store values, while executing a query.

substitution variables (*) ☒

database tables ☐

literal values ☐

database fields ☐

Correct

(1/1) Points

49. 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

50. The ORDER BY clause must be placed before the WHERE clause in a SQL statement.

True ☐

False (*) ☒

Correct

(1/1) Points