Chapter 8 Quiz

Due Oct 31 at 11:59pm   **Points** 100   **Questions** 25   **Time Limit** None
Allowed Attempts 2

Attempt History

	Attempt	Time	Score
KEPT	**Attempt 2**	4 minutes	100 out of 100
LATEST	**Attempt 2**	4 minutes	100 out of 100
	Attempt 1	14 minutes	24 out of 100

⚠ Correct answers will be available on Nov 30 at 12am.

Score for this attempt: **100** out of 100
Submitted Oct 31 at 4:40pm
This attempt took 4 minutes.

Question 1   4 / 4 pts

How many types are possible for elements of a JSON document?

- ◉ 6

- ○ Zero - JSON elements do not have a type

- ○ Unlimited - JSON element types are user-defined

- ○ 3

Question 2   4 / 4 pts

Elements can be nested in _____.

○ neither XML nor JSON

◉ both XML and JSON

○ JSON but not XML

○ XML but not JSON

Question 3   4 / 4 pts

The PosgreSQL ARRAY type is an example of a _____ type.

○ object

○ semantic

○ simple

◉ collection

Question 4   4 / 4 pts

What is the difference between the ENUM type and the SET type?

◉ Each ENUM value has exactly one element, each SET value can have many elements.

○ ENUM has a character base type, SET has a numeric base type.

○ ENUM values are compressed, SET values are not.

○ ENUM and SET types are equivalent.

Question 5   4 / 4 pts

MONEY is an example of a _____ type.

○ character

○ integer

◉ semantic

○ binary

Question 6   4 / 4 pts

An R-tree has a _____ index with index entries containing _____.

○ multi-level, column values

◉ multi-level, MBRs

○ single-level, MBRs

○ single-level, column values

Question 7   4 / 4 pts

Elements of the _____ type can be repeated and are not ordered.

○ SET

○ ARRAY

○ LIST

◉ MULTISET

Question 8   4 / 4 pts

In _____ data, each element is named, and element types are not explicitly declared.

○ unstructured

○ complex

◉ semistructured

○ structured

Question 9   4 / 4 pts

In MySQL, a column has a SET type with 16 possible elements. How many bytes does each column value require?

○ 8

◉ 2

  ○ 1

  ○ 4

Question 10   4 / 4 pts

In Oracle Database, the object type _____.

  ○ can define an entire table only

  ● can define either an individual column or an entire table

  ○ can define an individual column only

  ○ is not supported

Question 11   4 / 4 pts

What is wrong with the syntax of this XML?

```
<Menu>
    <Item>
        <Name>Green salad</Name>
        <Description>Lettuce, tomatoes, green peppers</Description>
        <Price>7.00</Price>
    </Item>
    <Item>
        <Name>Greek salad</Name>
        <Description>Cucumbers, tomatoes, onions, feta cheese</Description>
        <Price>8.50</Price>
    </Item>
    <Item>
        <Name>Cobb salad</Name>
        <Description>Eggs, bacon, lettuce, tomatoes, green onions</Description
>
        <Price>11.00</Price>
    </Item>
</Menu>
```

○ Tag names cannot be capitalized.

○ XML cannot contain multiple tags with the same name.

○ Tags cannot be nested inside other tags.

◉ The XML syntax is correct.

Question 12   4 / 4 pts

Which of the following does NOT appear in the Oracle Database's
CREATE TYPE statement below?

```
CREATE TYPE NameType AS OBJECT ( ... )
```

○ Property names and types

◉ Function body

○ Function names and return types

○ Procedure names and parameters

Question 13   4 / 4 pts

In MySQL, spatial values _____ numeric values.

○ are the same as

○ must be converted to numeric values using spatial functions prior to comparing with

○ cannot be compared to

○ can be compared directly with

Question 14   4 / 4 pts

Geographic data is _____.

○ another name for geometric data

◉ defined with reference to the surface of the earth

○ not supported in MySQL

○ any two-dimensional spatial data

Question 15   4 / 4 pts

In an object-programming language, a class is like a _____, and an object is like a database _____.

○ schema, instance

◉ composite type, row

○ table, column

○ object, query

Question 16   4 / 4 pts

A complex type _____.

○ cannot be used in a join query

○ is defined by the user, not the database system

◉ has a richer internal structure than a simple type

○

has multiple values per table cell, from the perspective of the database
system

Question 17   4 / 4 pts

Which type is complex?

◉ JSON

○ DATE

○ BLOB

○ TEXT

Question 18   4 / 4 pts

Select the correct WKT syntax for a polygon.

○ POLYGON((0 0) (20 10) (10 20) (0 0))

○ POLYGON(0 0; 20 10; 10 20; 0 0)

○ POLYGON(0 0, 20 10, 10 20, 0 0)

⦿ POLYGON((0 0, 20 10, 10 20, 0 0))

Question 19
4 / 4 pts

How many bytes does POINT(18.5 -20) require in internal MySQL format?

○ 32

○ 20

⦿ 24

○ 16

Question 20
4 / 4 pts

A user-defined type is defined in terms of a _____ type.

○ simple

⦿ base

○ complex

○ built-in

Question 21   4 / 4 pts

An object-relational database is _____.

○ an object database that supports subtables and supertables

○ a software layer between a relational database and an object-oriented programming language

◉ a relational database that supports an object type

○ an object-oriented programming language with database capabilities such as transaction management

Question 22   4 / 4 pts

MySQL stores JSON values as _____.

◉ an internal binary format

○ a TEXT type

○ a VARCHAR type

○ XML values

Question 23   4 / 4 pts

One goal of object-relational database technology is to _____.

○ reduce data storage space

◉ simplify database programming

○ simplify database administration

○ improve query response time

Question 24   4 / 4 pts

In two dimensions, a minimum bounding rectangle is the _____?

○ the rectangular area aligned with the X- and Y-axes that contains all spatial values

○ the minimum area of a polygon or multipolygon

◉ the smallest rectangle aligned with the X- and Y-axes that contains a spatial value

○ the sum of the spatial values contained within a rectangle

Question 25

4 / 4 pts

A standardized spatial reference system is identified with a/an _____.

○ standard coordinate system

○ data type

◉ SRID

○ latitude and longitude

Quiz Score: **100** out of 100