Version: 8.0

Question: 1

What is the most effective way to compare all the geometries in one layer to all the geometries in another?

A. usingSDO_CROSS
B. usingSDO_RELATE
C. usingSDO_JOIN
D. usingSDO_LAYER
E. usingSDO_UNION

Answer: B

Explanation:
SDO_RELATE
Format: SDO_RELATE(geometry1, geometry2, param);
Description
Uses the spatial index to identify either the spatial objects that have a particular spatial interaction with a given object such as an area of interest, or pairs of spatial objects that have a particular spatial interaction.
This operator performs both primary and secondary filter operations.
References:
https://docs.oracle.com/cd/B28359_01/appdev.111/b28400/sdo_operat.htm#SPATL1039

Question: 2

In the following SQL statement:

```
SQL> CREATE INDEX weather_patterns_sidx ON weather_patterns(geom)
INDEXTYPE IS MDSYS.SPATIAL_INDEX LOCAL _____ ;
```

What syntax should follow if you want to build each partition's index later for better manageability?

A. DUMMY
B. UNUSABLE
C. INITIALIZE
D. ALL
E. CASCADE

Answer: B

Explanation:
Create index mdsys.spatial_index local

Creating a Local Partitioned Spatial Index

If you want to create a local partitioned spatial index, Oracle recommends that you use the procedure in this section instead of using the PARALLEL keyword, to avoid having to start over if the creation of any partition's index fails for any reason (for example, because the tablespace is full). Follow these steps:

Create a local spatial index and specify the UNUSABLE keyword. For example:

CREATE INDEX sp_idx ON my_table (location)
INDEXTYPE IS mdsys.spatial_index
PARAMETERS ('tablespace=tb_name work_tablespace=work_tb_name')
LOCAL UNUSABLE;

This statement executes quickly and creates metadata associated with the index.

References:https://docs.oracle.com/database/121/SPATL/creating-local-partitioned-spatial-index.htm

Question: 3

Which statement is true about the networks managed by the Oracle Spatial Network Data Model?

A. A link connects two or more nodes.
B. In a directed network, all links can be traversed in both directions.
C. A link can have the same node as start end nodes.
D. A node must be connected to at least two links.

Answer: C

Explanation:

Question: 4

Which statement correctly defines the corresponding Open Geospatial Consortium (OGC) Web Services standards?

A. Web Map Service (WMS) enables browsing and querying against catalog servers.Web Feature Service (WFS) enables geocoding, routing, and usage of mapping and directory services.OpenGIS Location Service (OpenLS) enables access, search, and modification of geospatial features.Catalog Service for the Web (CSW) enables requests and delivery of maps.
B. CSW enables browsing and querying against catalog servers.WMS enables access, search, and modification of geospatial features.OpenLS enables geocoding, routing, and usage of mapping and directory services.WFS enables requests and delivery of maps.
C. WFS enables access, search, and modification of geospatial features.CSW enables browsing and querying against catalog servers.WMS enables requests and delivery of maps.OpenLS enables geocoding, routing, and usage of mapping and directory services.
D. WFS enables access, search, and modification of geospatial features.CSW enables browsing and querying against catalog servers.WMS enables requests and modification of maps.OpenLS enables geocoding, routing, and usage of mapping and directory services.

Answer: C

Explanation:

VMS:The OpenGIS Web Map Service Interface Standard (WMS) provides a simple HTTP interface for requesting geo-registered map images from one or more distributed geospatial databases. A WMS request defines the geographic layer(s) and area of interest to be processed. The response to the request is one or more geo-registered map images (returned as JPEG, PNG, etc) that can be displayed in a browser application. The interface also supports the ability to specify whether the returned images should be transparent so that layers from multiple servers can be combined or not.

CSW: Catalogue services support the ability to publish and search collections of descriptive information (metadata) for data, services, and related information objects. Metadata in catalogues represent resource characteristics that can be queried and presented for evaluation and further processing by both humans and software. Catalogue services are required to support the discovery and binding to registered information resources within an information community.

WFS: The Web Feature Service Interface Standard (WFS) provides an interface allowing requests for geographical features across the web using platform-independent calls.

OpenLS: The OpenGIS Open Location Services Interface Standard (OpenLS) specifies interfaces that enable companies in the Location Based Services (LBS) value chain to "hook up" and provide their pieces of applications such as emergency response (E-911, for example), personal navigator, traffic information service, proximity service, location recall, mobile field service, travel directions, restaurant finder, corporate asset locator, concierge, routing, vector map portrayal and interaction, friend finder, and geography voice-graphics. These applications are enabled by interfaces that implement OpenLS services such as a Directory Service, Gateway Service, Geocoder Service, Presentation (Map Portrayal) Service and others.

References:http://www.opengeospatial.org/standards/wms

Question: 5

The match mode for a geocoding operation determines how closely the attributes of an input address must match the data stored in the geocoder schem

a. Which MATCHMODE attribute would you use so that the geocoder can deliver results despite any discrepancies in the input address?

A. RELAX_ALL
B. EXACT
C. RELAX_BASE_NAME
D. DEFAULT
E. Null

Answer: D

Explanation:

DEFAULT is equivalent to RELAX_POSTAL_CODE, in which the postal code (if provided), base name, house or building number, and street type can be different from the data used for geocoding.

IncorrectAnswers:

A, E: There are no match modes named RELAX_ALL or NULL.

B:Exact: All attributes of the input address must match the data used for geocoding.

C:RELAX_BASE_NAME:The base name of the street, the house or building number, and the street type can be different from the data used for geocoding. For example, if Pleasant Valley is the base name of a street in the data used for geocoding, Pleasant Vale would also match as long as there

were no ambiguities or other matches in the data.
References:https://docs.oracle.com/cd/B28359_01/appdev.111/b28400/sdo_geocode_concepts.ht
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Question: 6

Which GDAL/OGR command will load a geotiff file named satellite.tif into a georaster column named GEORASTER, in a table named IMAGES with an RDT table named IMAGES_RDT? Assume that the database name, username, and password are mvdemo.

A. gdal_create −of georaster GDAL_IMPORT, GDAL_RDTgdal_import −of georaster satellite.tifgeor:mvdemo/mvdemo@mvdemo, IMAGES, IMAGES_RDT
B. gdal_import −of georaster satellite.tif geor:mvdemo/mvdemo@mvdemo, GDAL_IMPORT, GDAL_RDT
C. gdal_warp −of georaster satellite.tif geor:mvdemo/mvdemo@mvdemo, GDAL_IMPORT, GDAL_RDT
D. gdal_translate −of georaster satellite.tif geor:mvdemo/mvdemo@mvdemo, images, georaster

Answer: D

Explanation:
The gdal_translate utility can be used to convert raster data between different formats, potentially performing some operations like subsettings, resampling, and rescaling pixels in the process.
Parameter -of format: Select the output format. The default is GeoTIFF (GTiff). Use the short format name.

Question: 7

Which command will combine two simple overlapping polygons (geom1 and geom2) into a single geometry that excludes the overlapped region?
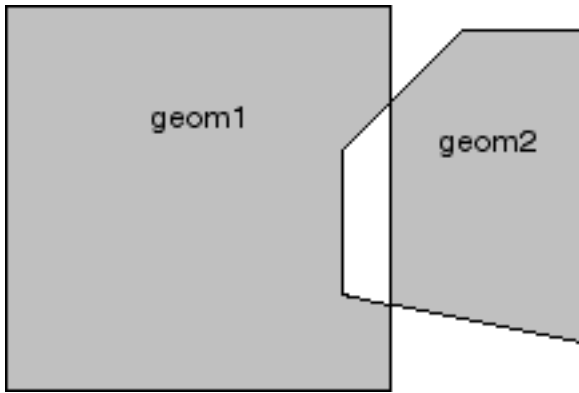
A. SDO_GEOM.SDO_EXCLUDE(geom1, geom2, .05)
B. SDO_GEOM.SDO_INTERSECTION(geom1, geom2, .05)
C. SDO_GEOM.SDO_UNION(geom1, geom2, .05)
D. SDO_GEOM.SDO_XOR(geom1, geom2, .05)
E. SDO_GEOM.SDO_AGGR_UNION(geom1, geom2, .05)
F. SDO_GEOM.SDO_DIFFERENCE(geom1, geom2, .05)

Answer: D

Explanation:
SDO_GEOM.SDO_XORreturns a geometry object that is the topological symmetric difference (XOR operation) of two geometry objects.
In Figurebelow, the shaded area represents the polygon returned when SDO_XOR is used with a square (geom1) and another polygon (geom2).

References:https://docs.oracle.com/cd/B28359_01/appdev.111/b28400/sdo_objgeom.htm

Question: 8

Identify the partitioning type that is supported in Oracle Spatial.

A. HASH
B. RANGE
C. INTERVAL
D. LIST
E. COMPOSITE

Answer: B

Explanation:
Oracle's scalable database architecture includes partitioning, in which a single logical table and its indexes are broken up into one or more physical tables, each with its own index. There are many different ways to partition data, however this paper will focus on range partitioning with Oracle Spatial. Range partitioning is the currently the only partitioning scheme used with spatial indexes.
References:http://download.oracle.com/otndocs/products/spatial/pdf/spatial_wp10_bestprac.pdf(page 3)