Quizzes: Chapter 14

1. In a three-level DBMS architecture, the layer that interacts directly with the hardware is the _____ level.
   a. external
   b. conceptual
   c. internal
   d. physical
   Correct Answer: (c)

2. In a three-level DBMS architecture, the _____ level determines where data is actually stored on the storage devices.
   a. external
   b. conceptual
   c. internal
   d. physical
   Correct Answer: (c)

3. The _____ level of a three-level DBMS architecture defines the logical view of the data.
   a. external
   b. conceptual
   c. internal
   d. physical
   Correct Answer: (b)

4. The data model and the schema of a DBMS are often defined at the _____ level.
   a. external
   b. conceptual

c. internal
d. physical
Correct Answer: (b)

5. In a three-level DBMS architecture, the _____ level interacts directly with the users.
a. external
b. conceptual
c. internal
d. physical
Correct Answer: (a)

6. Of the various database models, the _____ model is the most prevalent today.
a. hierarchical
b. network
c. relational
d. linked list
Correct Answer: (c)

7. Each column in a relation is called _____.
a. an attribute
b. a tuple
c. a union
d. an attitude
Correct Answer: (a)

8. Each row in a relation is called _____.
a. an attribute
b. a tuple
c. a union
d. an attitude
Correct Answer: (b)

9. A unary operator is applied to _____ relation(s) and creates an output of _____ relation(s).

a. one, one
b. one, two
c. two, one
d. two, two

Correct Answer: (a)

10. A binary operator is applied to _____ relations (s) and creates an output of _____ relation(s).
a. one, one
b. one, two
c. two, one
d. two, two

Correct Answer: (c)

11. The unary _____ operation always results in a relation that has exactly one more row than the original relation.
a. insert
b. delete
c. update
d. select

Correct Answer: (a)

12. If you want to change the value of an attribute of a tuple, you use the _____ operation.
a. project
b. join
c. update
d. select

Correct Answer: (c)

13. The operation that takes two relations and combines them based on common attributes is the _____ operation.
a. join
b. project
c. union
d. intersection

Correct Answer: (a)

14. If you need to delete an attribute in a relation, you can use the _____ operation.
    a. join
    b. project
    c. union
    d. intersection
    Correct Answer: (b)

15. You want to create a relation called New that contains tuples that belong to both relation A and relation B. For this, you can use the _____ operation.
    a. select
    b. union
    c. project
    d. intersection
    Correct Answer: (d)

16. Which of the following is a unary operator?
    a. intersection
    b. union
    c. join
    d. project
    Correct Answer: (d)

17. Which of the following is a binary operator?
    e. select
    f. update
    g. difference
    h. all of the above
    Correct Answer: (c)

18. _____ is a declarative language used on relational databases.
    a. PDQ
    b. SQL

c. LES

d. PBJ

Correct Answer: (b)