

Question 1

The simple attribute may be composed of several components

True

False  ✓

Question 2

..... is a collection of related fields

a. Database

b. Field

c. Table

d. Record  ✓

Question 3

A data view is used to hide storage details and present the users with a conceptual view of the database

True

False  ✓

Question 4

..... is a group of related characters

a. Record

b. Table

c. Database

d. Field  ✓

Question 5

..... is a collection of related records

a. Database

b. Table  ✓

c. Record

d. Field

Question 6

Attributes and Entities are the same

True

False  ✓

Question 7

In ..... database model one parent per node

- a. Relational
- b. Object-Oriented
- c. Hierarchical
- d. Network 1

Question 8

..... Programs are designed to work with data that is logically structured or arranged in a particular way

- a. DBMS
- b. Table
- c. Record
- d. Database

Question 9

Database Schema is the illustrative display of most aspects of a database

True

False

Question 10

The relation is a set of concepts to describe the structure of a database, the operations, and the constraints

True

False

Question 11

..... is an integrated collection of logically related tables

- a. Field
- b. Database
- c. Table
- d. Record

Question 12

..... helps manage the overall database

- a. Data definition subsystem

- b. Data manipulation subsystem
- c. DBMS engine
- d. DBA

Question 13

The ..... database model is more flexible type where there are no access paths down a hierarchy

- a. Network
- b. Object-Oriented
- c. Relational
- d. Hierarchical

Question 14

Not one of the advantages to having databases

- a. Data integrity
- b. Security
- c. Sharing
- d. Increase data redundancy

Question 15

The database state changes very infrequently

True

False

Question 16

Entities are specific objects or things in the mini-world that are represented in the database.

True   
False

Question 17

In ..... database model each child node may have more than one parent node

- a. Object-Oriented
- b. Network
- c. Hierarchical

d. Relational

Question 18

The DBMS is the description of a database

True

False

Question 19

ER model has three main concepts

True

False

Question 20

Users may be divided into Actors on the Scene and Workers Behind the Scene

True

False

Question 1

Which of the following is the correct order of keywords for SQL SELECT statements?

- a. WHERE, FROM, SELECT
- b. SELECT, FROM, WHERE
- c. SELECT, WHERE, FROM
- d. FROM, WHERE, SELECT

Answer: b. SELECT, FROM, WHERE

Question 2

The SQL WHERE clause:

- a. Neither A nor B are correct.
- b. Both A and B are correct.
- c. limits the column data that are returned.
- d. limits the row data are returned.

Answer: d. limits the row data are returned

Question 3

The Database Management System software together with the data itself.

- a. Table
- b. DBMS
- c. Database System
- d. Mini-world

Answer: c. Database System

Question 4

Which of the following is a legal expression in SQL?

- a. SELECT \* FROM SALES WHEN PRICE = NULL;
- b. SELECT NULL FROM SALES;
- c. SELECT # FROM SALES;
- d. SELECT NAME FROM SALES;

Answer: d. SELECT NAME FROM SALES

Question 5

The relation is a set of concepts to describe the structure of a database, the operations, and the constraints.

- a. True
- b. False

Answer: b. False

Question 6

The data model that provides concepts that describe details of how data is stored in the computer is called .....

- a. Representational data model
- b. Physical data model
- c. Implementation data model
- d. Conceptual data model

Answer: b. Physical data model

Question 7

The description of a particular database (e.g. data structures, types, and constraints) is called .....

- a. DBMS
- b. Database
- c. DBMS catalog
- d. Meta-data

Answer: d. Meta-data

Question 8

Redundancy is minimized with a computer-based database approach.

- a. True
- b. False

Answer: a. True

Question 9

Retrieve the name of each employee who works on all the projects controlled by department number 5.

Question 9 Answer:

- a. ~~SELECT FNAME, LNAME FROM EMPLOYEE WHERE ((SELECT PNO FROM PROJECT WHERE SSN=ESSN) CONTAINS (SELECT PNUMBER FROM WORKS ON WHERE DNUM=5))~~
- b. ~~SELECT FNAME, LNAME FROM EMPLOYEE WHERE ((SELECT PNO FROM WORKS ON WHERE SSN=ESSN) CONTAINS (SELECT PNUMBER FROM WORKS ON WHERE DNUM=5))~~
- c. ~~SELECT FNAME, LNAME FROM EMPLOYEE WHERE ((SELECT PNO FROM PROJECT WHERE SSN=ESSN) CONTAINS (SELECT PNUMBER FROM PROJECT WHERE DNUM=5))~~
- d. ~~SELECT FNAME, LNAME FROM EMPLOYEE WHERE ((SELECT PNO FROM WORKS ON WHERE SSN=ESSN) CONTAINS (SELECT PNUMBER FROM PROJECT WHERE DNUM=5))~~

Answer: d. ~~SELECT FNAME, LNAME FROM EMPLOYEE WHERE ((SELECT PNO FROM WORKS ON WHERE SSN=ESSN) CONTAINS (SELECT PNUMBER FROM PROJECT WHERE DNUM=5))~~

Question 10

The result of a SQL SELECT statement is ..... 

- a. form

- b. report
- c. file
- d. table

Answer: d. table

Question 11

The union of two tables is obtained by concatenating them

- a. True
- b. False

Answer: True

Question 12

A SQL query automatically eliminates duplicates?

- a. True
- b. False

Answer: False

Question 13

Set of relational algebra operations  $\{\sigma, \pi, \cup, \rho, -, \times\}$  is a complete set

- a. True
- b. False

Answer: True

Question 14

The indexes are an example of .....

- a. Internal Schema
- b. Conceptual Schema
- c. External Schema
- d. Entity-based Schema

Answer: Internal Schema

Question 15

SQL can be used to:

- a. Modify database data only
- b. Query database data only
- c. All of this can be done by SQL
- d. Create database structures only

Answer: c. All of this can be done by SQL

Question 16

SELECT \* FROM tab;

- a. Retrieve all tables

- b. Retrieve all the attributes from entity tab ✓
- c. None of this is correct.
- d. Retrieve all data from tables tab

Answer: Retrieve all tables

Question 17

The bank-tellers or reservation clerks are an example of ..... end-user

- a. Naïve
- b. Sophisticated
- c. Casual
- d. Stand-alone

Answer: Naïve

Question 18

Some part of the real world about which data is stored in a database.

- a. Mini-world
- b. DBMS
- c. Database System
- d. Table

Answer: Mini-world

Question 19

The schema at the conceptual level to describe the structure and constraints for the whole database for a community of users.

- a. External Schema
- b. Internal Schema
- c. Database Schema
- d. Conceptual Schema

Answer: Conceptual Schema

Question 20

What is a "tuple"?

- a. Another name for a table in an RDBMS
- b. Another name for the key linking different tables in a database.
- c. An attribute attached to a record.
- d. A row or record in a database table.

Answer: d. A row or record in a database table

Question 21

What does the abbreviation DBMS stand for?

- a. Database Management System.
- b. Data Borrowing and Movement Software.
- c. Database Manipulation Software.

d. Digital Base Mapping System.

Answer: a. Database Management System.

Question 22

Which of the following are characteristics of an RDBMS?

- a. Tables are linked by common data known as keys.
- b. Queries are possible on individual or groups of tables.
- c. It cannot use SQL
- d. Keys may be unique or have multiple occurrences in the database.

Answer: a. Tables are linked by common data known as keys.

Question 23

The database state changes every time the database is updated.

True

False

Answer: True

Question 24

To sort the results of a query use:

- a. GROUP BY
- b. None of this is correct
- c. ORDER BY
- d. SORT BY

Answer: c. ORDER BY

Question 25

The business analysts, scientists, and engineers are an example of ..... end-user.

- a. Casual
- b. Sophisticated
- c. Naive
- d. Stand-alone

Answer: b. Sophisticated.

Question 26

The command to eliminate a table from a database is:

- a. DELETE TABLE CUSTOMER;
- b. DROP TABLE CUSTOMER;
- c. REMOVE TABLE CUSTOMER;
- d. UPDATE TABLE CUSTOMER;

Answer: b. DROP TABLE CUSTOMER; ✓

Question 27

Which one of the following sorts rows in SQL?

- a. ALIGN BY
- b. SORT BY
- c. ORDER BY
- d. GROUP BY

Answer: c. ORDER BY or GROUP BY

Question 28

The command used to delete a particular column in a relation is  
.....

- a. UPDATE TABLE
- b. TRUNCATE COLUMN
- c. DELETE COLUMN
- d. ALTER, DROP ✓

Answer: d. ALTER, DROP

Question 29

A software package to facilitate the creation and maintenance of a computerized database.

- a. Mini-world
- b. Database System
- c. Table
- d. DBMS

Answer: d. DBMS

Question 30

Logical data view focuses on the meaning, content, and context of the data.

True  
False

Answer: False

Question 31

The SQL statement that queries or reads data from a table is  
.....

- a. QUERY
- b. SELECT
- c. None of this is correct
- d. READ

Answer: b. SELECT

Question 32

The tax program user is an example of ..... end-user.

- a. Naïve
- b. Sophisticated
- c. Stand-alone
- d. Casual

Answer: c. Stand-alone

Question 33

The simple attribute may be composed of several components.

True  
False

Answer: False

Question 34

Data are facts or observations about people, places, things, and events.

True  
False

Answer: True

Question 35

A SQL query will not work if there are no indexes on the relations.

True  
False

Answer: False

Question 36

Which of the following is a comparison operator in SQL?

- a. Double equal sign ( == ) ✓
- b. LIKE
- c. Single equal sign ( = )
- d. BETWEEN

Answer: a. Double equal sign ( == )

Question 37

A ..... stores the description of a particular database.

- a. meta-data
- b. DBMS
- c. DBMS catalog
- d. Database

Answer: c. DBMS catalog

Question 38

The command to remove rows from a table 'CUSTOMER' is:

- a. UPDATE FROM CUSTOMER
- b. DROP FROM CUSTOMER
- c. REMOVE FROM CUSTOMER
- d. DELETE FROM CUSTOMER WHERE

Answer: d. DELETE FROM CUSTOMER WHERE

Question 39

Retrieve the social security numbers of all employees who work on project number 1, 2, or 3.

- a. SELECT DISTINCT ESSN FROM WORKS\_ON WHERE PNO = 1, 2, 3
- b. SELECT DISTINCT ESSN FROM WORKS\_ON WHERE PNO IN (1, 2, 3)**
- c. SELECT ESSN DISTINCT FROM WORKS\_ON WHERE PNO IN (1, 2, 3)
- d. SELECT ESSN DISTINCT FROM WORKS\_ON WHERE PNO = 1, 2, 3

Answer: b. SELECT DISTINCT ESSN FROM WORKS\_ON WHERE PNO IN (1, 2, 3)

Question 40

Data is processed in two ways: batch and real-time.

True  
False

Answer: True

Question 41

A row in a database can also be called a domain.

True  
False

Answer: False

Question 42

Projection selects certain columns from a table.

True  
False

Answer: True

Question 43

The data model that now in several commercial products.

- a. Hierarchical Data Model
- b. Object-oriented Data Models
- c. Relational Data Model
- d. Network Data Model

Answer: c. Relational Data Model

Question 44

The data model that able to model complex relationships and represents semantics of add/delete on the relationships.

- a. Network Data Model
- b. Relational Data Model
- c. Hierarchical Data Model
- d. Object-oriented Data Models

Answer: a. Network Data Model

Question 45

To remove duplicate rows from the results of an SQL SELECT statement, the ..... qualifier specified must be included.

- a. UNIQUE
- b. ONLY
- c. DISTINCT ✓
- d. SINGLE

Answer: c. DISTINCT

Question 46

Physical data view focuses on the actual format and location of data.

True

False

Answer: False

Question 47

Retrieve the names of employees who have no dependents.

- a. SELECT FNAME, LNAME FROM EMPLOYEE WHERE EXISTS (SELECT \* FROM DEPENDENT WHERE SSN=ESSN)
- b. SELECT FNAME, LNAME FROM DEPENDENT WHERE NOT EXISTS (SELECT \* FROM EMPLOYEE WHERE SSN=ESSN) ✗
- c. SELECT FNAME, LNAME FROM EMPLOYEE WHERE NOT EXISTS (SELECT \* FROM DEPENDENT WHERE SSN=ESSN) ✓
- d. SELECT FNAME, LNAME FROM EMPLOYEE WHERE EXISTS NOT (SELECT \* FROM DEPENDENT WHERE SSN=ESSN) ✗

Answer:c. SELECT FNAME, LNAME FROM EMPLOYEE WHERE NOT EXISTS (SELECT \* FROM DEPENDENT WHERE SSN=ESSN)

Question 48

SQL data definition commands make up aNo .....

- a. XML
- b. DDL
- c. HTML
- d. DML

Answer: b. DDL

Question 49

The DBMS is the description of a database.

True

False

Answer: False

Question 50

You can add a row using SQL in a database with which of the following?

- a. MAKE
- b. CREATE
- c. INSERT
- d. ADD

Answer: c. INSERT

Question 51

Database administrators considered as .....

- a. Actors on the Scene ✓
- b. Database user
- c. Database programmers
- d. Workers Behind the Scene

Answer: a. Actors on the Scene

Question 52

The end-user that accesses the database occasionally when needed is called .....

- a. Casual ✓
- b. Stand-alone
- c. Sophisticated
- d. Naive

Answer: a. Casual

Question 53

Users may be divided into Actors on the Scene and Workers Behind the Scene

True

False

Answer: True

Question 54

R S Includes all tuples that are in both R and S

True

False

Answer: False

Question 55

Database Schema is the illustrative display of most aspects of a database

True

False

Answer: False