

1. Given the evolution of DBMSs, business data is now:
- a. Stored in main memory and stays resident there even after the application that uses it terminates.
  - b. Stored only if it is relevant to business decisions.
  - c. Stored indefinitely in case it's needed since storing it is much cheaper now.
  - d. None of the above.

**Answer:** (b).Stored only if it is relevant to business decisions.

2. Which of the following is not true of a DBMS?
- a. It provides efficient storage and retrieval of data.
  - b. It has evolved over the years into a fairly simple set of tools that are relatively easy to master.
  - c. Marketplace demands and product innovation have led to the development of a broad range of features.
  - d. None of the above.

**Answer:** (b).It has evolved over the years into a fairly simple set of tools that are relatively easy to master.

3. Nonprocedural access to a database:
- a. Can provide a dramatic improvement in software productivity.
  - b. Allows a user to submit queries to a database without having to know how the data will be retrieved.
  - c. Is supported by more than one tool in most DBMSs.
  - d. All of the above.

**Answer:** (d).All of the above.

4. Which of the following statements is not true of a desktop DBMS?
- a. They usually run on personal computers or small servers.

- b. They have a much lower cost than other DBMSs.
- c. Although useful for processing ad hoc queries, they cannot perform transaction processing.
- d. They usually support databases used by work teams and small businesses.

**Answer:** (c).Although useful for processing ad hoc queries, they cannot perform transaction processing.

5. In the evolution of database technology, second-generation products are considered to be the first true DBMSs.
- a. They were "navigational", i.e. the programmer had to write code to navigate through a network of linked records.
  - b. Of their foundation on mathematical relations and associated operators.
  - c. They supported sequential and random searching.
  - d. They could manage multiple entities and relationships.

**Answer:** (d).They could manage multiple entities and relationships.

6. In the evolution of database technology, third-generation products supplanted second-generation systems.
- a. Nonprocedural database access was an improvement over navigational access.
  - b. IBM supported the CODASYL standard of database definition and manipulation.
  - c. Nonprocedural languages were still not very efficient.
  - d. All of the above.

**Answer:** (a).Nonprocedural database access was an improvement over navigational access.

7. Which statement is not true of the Three Schema Architecture?
- a. It is an official standard of the American Standards Institute (ANSI).
  - b. It is an architecture for compartmentalizing database descriptions.
  - c. Its details have been widely adopted in third- and fourth-generation DBMSs.

**d.** None of the above.

**Answer:** (c).Its details have been widely adopted in third- and fourth-generation DBMSs.

**8.** Which of the following statements is not true of information resource management?

- a.** It is very different and much more challenging than managing the other physical resources of an organization.
- b.** Its goal is to use information technology as a tool for processing, distributing, and integrating information throughout the organization.
- c.** Its emergence has created new management responsibilities.
- d.** None of the above.

**Answer:** (a).It is very different and much more challenging than managing the other physical resources of an organization.

**9.** A Database Management System (DBMS) is

- a.** Collection of interrelated data
- b.** Collection of programs to access data
- c.** Collection of data describing one particular enterprise
- d.** All of the above

**Answer:** (d).All of the above

**10.** Data Manipulation Language enables users to

- a.** Retrieval of information stored in database
- b.** Insertion of new information into the database
- c.** Deletion of information from the database
- d.** All of the above

**Answer:** (d).All of the above

**11.** Which of the following is Database Language?

- a. Data Definition Language
- b. Data Manipulation Language
- c. Query Language
- d. All of the above

**Answer:** (d).All of the above

**12.** Which of the following is not a function of DBA?

- a. Network Maintenance
- b. Routine Maintenance
- c. Schema Definition
- d. Authorization for data access

**Answer:** (a).Network Maintenance

**13.** Which of the following represents a relationship among a set of values.

- a. A Row
- b. A Table
- c. A Field
- d. A Column

**Answer:** (a).A Row

**14.** Column header is refer as

- a. Table
- b. Relation
- c. Attributes
- d. Domain

**Answer:** (c).Attributes

**15.** Which of the following is not Modification of the Database?

- a. Deletion
- b. Insertion
- c. Sorting
- d. Updating

**Answer:** (c).Sorting

**16.** Which of the following in true regarding Null Value?

- a. Null = 0
- b. Null < 0
- c. Null > 0
- d. Null <> 0

**Answer:** (d).Null <> 0

**17.** ODBC stands for \_\_\_\_\_

- a. Offline database connection

- b. Oriented database connection
- c. Open database connection
- d. None of the above

**Answer:** (c).Open database connection

**18.** \_\_\_\_\_ refers to the correctness and completeness of the data in a database?

- a. Data security
- b. Data integrity
- c. Data constraint
- d. Data independence

**19.** Data integrity constraints are used to:

- a. Control who is allowed access to the data
- b. Ensure that duplicate records are not entered into the table
- c. Improve the quality of data entered for a specific property (i.e., table column)
- d. Prevent users from changing the values stored in the table

**Answer:** (c).Improve the quality of data entered for a specific property (i.e., table column)

**20.** The DBMS acts as an interface between what two components of an enterprise-class database system?

- a. Database application and the database
- b. Data and the database
- c. The user and the database application

**Answer:** (a).Database application and the database

**1.** Which of the following is not a level of data abstraction?

- a. Physical Level
- b. Critical Level
- c. Logical Level
- d. View Level

**Answer:** (b).Critical Level

**2.** Which of the following is not an Schema?

- a. Database Schema
- b. Physical Schema
- c. Critical Schema
- d. Logical Schema

**Answer:** (c).Critical Schema

**3.** Which of the following is a Data Model?

- a. Entity-Relationship model
- b. Relational data model
- c. Object-Based data model
- d. All of the above

**Answer:** (d).All of the above

**4.** Logical design of database is called

- a.** Database Instance
- b.** Database Snapshot
- c.** Database Schema
- d.** All of the above

**Answer:** (c).Database Schema

**5.** Snapshot of the data in the database at a given instant of time is called

- a.** Database Schema
- b.** Database Instance
- c.** Database Snapshot
- d.** All of the above

**Answer:** (b).Database Instance

**6.** Which of the following is the structure of the Database?

- a.** Table
- b.** Schema
- c.** Relation
- d.** None of these

**Answer:** (b).Schema



7. A logical description of some portion of database that is required by a user to perform task is called as
- a. System View
  - b. User View
  - c. Logical View
  - d. Data View

**Answer:** (b).User View

8. \_\_\_\_\_ is a classical approach to database design?
- a. Left – Right approach
  - b. Right – Left approach
  - c. Top – Down approach
  - d. Bottom – Up approach

**Answer:** (c).Top – Down approach

9. Which of the following is the oldest database model?
- a. Relational
  - b. Hierarchical
  - c. Physical
  - d. Network

**Answer:** (d).Network

10. Which of the following indicates the maximum number of entities that can be involved in a relationship?
- a. Minimum cardinality

- b. Maximum cardinality
- c. ERD
- d. Greater Entity Count (GEC)

**Answer:** (b).Maximum cardinality

11. Which of the following data constraints would be used to specify that the value of cells in a column must be within a specific range?
- a. A domain constraint
  - b. A range constraint
  - c. An intrarelation constraint
  - d. An interrelation constraint

**Answer:** (a).A domain constraint

12. In a 1:N relationship, the foreign key is placed in:
- a. either table without specifying parent and child tables.
  - b. the parent table.
  - c. the child table.
  - d. either the parent table or the child table.

**Answer:** (c).the child table.

13. Which of the following column properties specifies whether or not cells in a column must contain a data value?
- a. Null status
  - b. Data type
  - c. Default value

**d.** Data constraints

**Answer:** (a).Null status

**14.** A primary key should be defined as:

- a.** NULL
- b.** NOT NULL
- c.** Either of the above can be used
- d.** None of the above are correct

**Answer:** (b).NOT NULL

**15.** Which of the following column properties would be used to specify that cells in a column must contain a m

- a.** Null status
- b.** Data type
- c.** Default value
- d.** Data constraints

**Answer:** (b).Data type

**16.** If a denormalization situation exists with a one-to-one binary relationship, which of the following is true?

- a.** All fields are stored in one relation.
- b.** All fields are stored in two relations.
- c.** All fields are stored in three relations.
- d.** All fields are stored in four relations.

**Answer:** (a).All fields are stored in one relation.

**17.** Selecting a data type involves which of the following?

- a. Maximize storage space
- b. Represent most values
- c. Improve data integrity
- d. All of the above

**Answer:** (c).Improve data integrity

**18.** What is the best data type definition for Oracle when a field is alphanumeric and has a length that can vary?

- a. VARCHAR2
- b. CHAR
- c. LONG
- d. NUMBER

**Answer:** (a).VARCHAR2

**19.** A multidimensional database model is used most often in which of the following models?

- a. Data warehouse
- b. Relational
- c. Hierarchical
- d. Network

**Answer:** (a).Data warehouse

**20.** Which of the following is not a factor to consider when switching from small to large block size?

- a. The length of all of the fields in a table row.
- b. The number of columns
- c. Block contention
- d. Random row access speed

**Answer:** (b).The number of columns

**1.** A Relation is a

- a. Subset of a Cartesian product of a list of attributes
- b. Subset of a Cartesian product of a list of domains
- c. Subset of a Cartesian product of a list of tuple
- d. Subset of a Cartesian product of a list of relations

**Answer:** (b).Subset of a Cartesian product of a list of domains

**2.** In mathematical term Table is referred as

- a. Relation
- b. Attribute
- c. Tuple
- d. Domain

**Answer:** (a).Relation

**3.** In mathematical term Row is referred as

- a.** Relation
- b.** Attribute
- c.** Tuple
- d.** Domain

**Answer:** (c).Tuple

**4.** \_\_\_\_\_ allow us to identify uniquely a tuple in the relation.

- a.** Superkey
- b.** Domain
- c.** Attribute
- d.** Schema

**Answer:** (a).Superkey

**5.** Minimal Superkeys are called

- a.** Schema keys
- b.** Candidate keys
- c.** Domain keys
- d.** Attribute keys

**Answer:** (b).Candidate keys

**1.** Which of the following is correct regarding Aggregate functions?

- a.** it takes a list of values and return a single values as result

- b. it takes a list of values and return a list of values as result
- c. it takes a single value and returns a list of values as result
- d. it takes a single value and returns a single value as result

**Answer:** (a).it takes a list of values and return a single values as result

**2.** Which of the following option is use to retrieval of data?

- a. Stack
- b. Data Structure
- c. Linked list
- d. Query

**Answer:** (d).Query

**3.** Establishing limits on allowable property values, and specifying a set of acceptable, predefined options that of:

- a. Attributes
- b. Data integrity constraints
- c. Method constraints
- d. Referential integrity constraints

**Answer:** (b).Data integrity constraints

**4.** \_\_\_\_\_ is a special type of integrity constraint that relates two relations & maintains consistency across the

- a. Entity Integrity Constraints
- b. Referential Integrity Constraint

- c. Domain Integrity Constraints
- d. Domain Constraints

**Answer:** (b).Referential Integrity Constraint

**5.** Which of the following is a physical storage media ?

- a. Tape Storage
- b. Optical Storage
- c. Flash memory
- d. All of the mentioned

**Answer:** (d).All of the mentioned

**6.** Which of the following creates a virtual relation for storing the query ?

- a. Function
- b. View
- c. Procedure
- d. None of the mentioned

**7.** Which of the following is the syntax for views where v is view name ?

- a. Create view v as "query name";
- b. Create "query expression" as view;
- c. Create view v as "query expression";
- d. Create view "query expression";



**Answer:** (c).Create view v as “query expression”;

**1.** Disadvantages of File systems to store data is:

- a.** Data redundancy and inconsistency
- b.** Difficulty in accessing data
- c.** Data isolation
- d.** All of the above

**Answer:** (d).All of the above

**2.** Which level of RAID refers to disk mirroring with block striping?

- a.** RAID level 1
- b.** RAID level 2
- c.** RAID level 0
- d.** RAID level 3

**Answer:** (a).RAID level 1

**3.** Optical disk technology uses

- a.** Helical scanning
- b.** DAT
- c.** a laser beam
- d.** RAID

**Answer:** (d).RAID

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|----|--|
| 1. | State true or false: SQL specifies a way of mentioning functional dependencies |
| a. | True   |
| b. | False  |
| c. | May be   |
| d. | Can't say  |

**Answer:** (b).False

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|----|--|
| 2. | State true or false: Most current database systems do not support constraints on materialized view |
| a. | True   |
| b. | False  |
| c. | May be   |
| d. | Can't say  |

**Answer:** (a).True

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|----|--|
| 3. | Multi valued dependencies are also called as _____ |
| a. | Equality generating dependencies                   |
| b. | Tuple generating dependencies                      |
| c. | Multi-purpose dependencies                         |
| d. | None of the mentioned                              |

**Answer:** (b).Tuple generating dependencies

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|----|--|
| 4. | Functional dependencies are sometimes referred to as _____ |
| a. | Equality generating dependencies                           |

- b. Tuple generating dependencies
- c. Multi-purpose dependencies
- d. None of the mentioned

**Answer:** (a).Equality generating dependencies

5. The \_\_\_\_\_ is a set of all functional and multi values dependencies implied by a set of functional dependencies.
- a. Star
  - b. Closure
  - c. Derivation
  - d. Evolution

**Answer:** (b).Closure

6. State true or false: If a relational schema is in \_\_\_\_\_ NF and A is a subset of R and B is also a subset of R, then A is a subset of B implies that B is a subset of A.
- a. 1
  - b. 2
  - c. 3
  - d. 4

**Answer:** (d).4

7. Which of the following normal forms does not exist?
- a. BCNF
  - b. PJNF

- c. 5NF
- d. None of the mentioned

**Answer:** (d).None of the mentioned

- 1. The SQL database language includes statements for:
  - a. Database definition.
  - b. Database manipulation.
  - c. Database control.
  - d. All of the above.

**Answer:** (d).All of the above.

- 2. A command to remove a relation from an SQL database
  - a. Delete table table name
  - b. Drop table table name
  - c. Erase table table name
  - d. Alter table table name

**Answer:** (b).Drop table table name

- 3. Which SQL Query is use to remove a table and all its data from the database?
  - a. Create Table
  - b. Alter Table
  - c. Drop Table
  - d. None of these

**Answer:** (c).Drop Table

**4.** A type of query that is placed within a WHERE or HAVING clause of another query is called

- a. Super query
- b. Sub query
- c. Master query
- d. Multi-query

**Answer:** (b).Sub query

**5.** Aggregate functions are functions that take a \_\_\_\_\_ as input and return a single value.

- a. Collection of values
- b. Single value
- c. Aggregate value
- d. Both a & b

**6.** Select \_\_\_\_\_ from instructor where dept name= 'Comp. Sci.';  
Which of the following should be used to find the mean of the salary ?

- a. Mean(salary)
- b. Avg(salary)
- c. Sum(salary)
- d. Count(salary)

**Answer:** (b).Avg(salary