1) Which of the following is generally used for performing tasks like creating the structure of the relations, deleting relation?

A. DML(Data Manipulation Language)
B. Query
C. Relational Schema
D. DDL(Data Definition Language)

Answer: D
Explanation: The term "DDL" stands for Data Definition Language, used to perform all other essential tasks such as deleting relation and related schemas in defining the structure relation
.

2) Which of the following provides the ability to query information from the database and insert tuples into, delete tuples from, and modify tuples in the database?

A. DML(Data Manipulation Language)
B. DDL(Data Definition Language)
C. Query
D. Relational Schema

Answer: A
Explanation: The term "DML" stands for the Data Manipulation Language used to perform the required changes in the relation's values.

3) The given Query can also be replaced with_____:

```
SELECT name, course_id
FROM instructor, teaches
WHERE instructor_ID= teaches_ID;
```

A. Select name,course_id from teaches,instructor where instructor_id=course_id;
B. Select name, course_id from instructor natural join teaches;
C. Select name, course_id from instructor;
D. Select course_id from instructor join teaches;

Answer: B
Explanation: Join clause joins two tables by matching the common column

4) Which one of the following given statements possibly contains the error?

A. select * from emp where empid = 10003;
B. select empid from emp where empid = 10006;
C. select empid from emp;
D. select empid where empid = 1009 and Lastname = 'GELLER';

Answer: D
Explanation: The Query given in option D does not contain the "from" clause, which specifies the relation from which the values have to be selected or fetched. Therefore the correct answer is D.

5) Ready the Query carefully:

```
SELECT emp_name
FROM department
WHERE dept_name LIKE ' _____ Computer Science';
```

In the above-given Query, which of the following can be placed in the Query's blank portion to select the "dept_name" that also contains Computer Science as its ending string?

A. &
B. _
C. %
D. $

Answer: C
Explanation: In the above-given Query, the "%" (like) operator will be used, which is generally used while searching for a certain pattern in the strings. It represents the single and multiple characters. In this case, it used with "Where "louse to select the "dept_name" that contains the Computer Since as its ending string. To understand it more clearly, consider the following syntax:

6) What do you mean by one-to-many relationships?

A. One class may have many teachers
B. One teacher can have many classes
C. Many classes may have many teachers
D. Many teachers may have many classes

Answer: B
Explanation: We can understand the "one to many" relationship as a teacher who may have more than one class to attend.

7) In the following Query, which of the following can be placed in the Query's blank portion to display the salary from highest to lowest amount, and sorting the employs name alphabetically?

```
SELECT *
FROM instructor
ORDER BY salary ____, name ___;
```

Ascending, Descending
Asc, Desc
Desc, Asc
All of the above

Answer: C
Explanation: To sort the salary from highest to lowest amount and display the employee's name alphabetically, one can use the "Desc and Asc" in the above-given Query.

8) The given Query can be replaced with _____:

```
SELECT name
FROM instructor1
WHERE salary <= 100000 AND salary >= 90000;
```

a.

```
SELECT name
FROM instructor1
WHERE salary BETWEEN 100000 AND 90000
```

b.

```
SELECT name
FROM instructor|
WHERE salary BETWEEN 90000 AND 100000;
```

c.

```
SELECT name
FROM instructor1
WHERE salary BETWEEN 90000 AND 100000;
```

d.

```
SELECT name
FROM instructor!
WHERE salary <= 90000 AND salary>=100000;
```

Answer: C
Explanation: The "SQL" contains a comparison known as the "BETWEEN," which is also used in one of the given queries, as you can see. The "BETWEEN" operator is generally used to simplify the "WHERE" clause that is used to specify that the value is greater than one value or greater than some values, less than one or more values.

9) A Database Management System is a type of _____software.

A. It is a type of system software
B. It is a kind of application software
C. It is a kind of general software
D. Both A and C

Answer: A
Explanation: The DBMS (or Database Management System) is a kind of system software used for several operations such as creating tables/databases, storing data, managing databases. It also allows modifying the data stored in the database as well.

10) The term "FAT" is stands for_____

A. File Allocation Tree
B. File Allocation Table
C. File Allocation Graph
D. All of the above

Answer: B
Explanation: The term "FAT" can be described as a file structure (or file architecture). In which all the information about the files where they are stored and where all these files need to be stored or in which directory, all that information generally stored in the file structure. Therefore the Operating system creates a table in which all the files and clusters are stored, known as the file allocation table.

11) Which of the following can be considered as the maximum size that is supported by FAT?

A. 8GB
B. 4GB
C. 4TB
D. None of the above

Answer: B
Explanation: The files with a size of less than 4 GB or equal to 4GB are easily supported by the FAT. All files with a size greater than the maximum size (or is 4Gb) are not supported by the FAT.

12) The term "NTFS" refers to which one of the following?

A. New Technology File System
B. New Tree File System
C. New Table type File System
D. Both A and C

Answer: A

Explanation: In the old operating systems, the file structure used to store and manage files is called the FAT 32 (or File Allocation Table). Later, when the technology evolves with time, a new type of file system is introduced, known as the New Technology File System. It overcomes all the drawbacks, issues that exist in FAT file architecture and has many other new features such as it is fast, it can handle files whose size is even greater than 4 GB.

13) Which of the following can be considered as the maximum size that is supported by NTFS?

A. 4GB
B. 16TB
C. 64TB
D. 8TB

Answer: A

Explanation: The New Technology File System was introduced in 1993 for the very first time as a part of new Windows operating systems (Windows NT 3.1). You may be surprised to know that windows are still using it because of its fast speed and can support files whose size is up to 16TB (16 terabytes), which is much more than that file size supported by the old system.

14) A huge collection of the information or data accumulated form several different sources is known as _____:

A. Data Management
B. Data Mining
C. Data Warehouse
D. Both B and CAnswer: C

Explanation: A huge collection of different types of data/information which collected from many different sources stored in one place is called a data warehouse. It works just like the standard warehouse, which is generally a type of holding area/building to store the different types of different goods in huge quantities until they are further distributed. Therefore the correct answer is Data Warehouse.

15) Which of the following can be used to extract or filter the data & information from the data warehouse?

A. Data redundancy
B. Data recovery tool
C. Data mining
D. Both B and C

Answer: C
Explanation: The tools used to obtain meaningful information or Data from the large collection of data (or from the Data Warehouses) are known as the Data mining tools. Through data mining, one can easily filter the useful information or data from the massive collection of the data. Therefore, the correct answer is Data Mining.

16) Which one of the following refers to the copies of the same data (or information) occupying the memory space at multiple places.

A. Data Repository
B. Data Inconsistency
C. Data Mining
D. Data Redundancy

Answer: D
Explanation: The data redundancy generally occurs whenever more than one copy of the exact same data exists in several different places. Sometimes it may cause data inconsistency, which can result in an unreliable source of data or information that is not good for anyone.

17) Which one of the following refers to the "data about data"?

A. Directory
B. Sub Data
C. Warehouse
D. Meta Data

Answer: D
Explanation: The Mata Data refers to the type of data that describes the other data or information.
A general file or document is nothing more than a sequence of bytes that contains information like file name, file size, and date & time when the document was created or modified.

18) Which of the following refers to the level of data abstraction that describes exactly how the data actually stored?

A. Conceptual Level
B. Physical Level
C. File Level
D. Logical Level

Answer: B

Explanation: Data abstraction means displaying or sharing only the data that is needed and hiding from all other data until it is necessary to share it. However, the data abstraction level that describes how the data was actually stored in the user's machine (or system) is known as the Physical level. Therefore the correct answer is B.

19) To which of the following the term "DBA" referred?

A. Data Bank Administrator
B. Database Administrator
C. Data Administrator
D. None of the above

Answer: B

Explanation: The term "DBA" refers to the Database Administrator that manages the whole database and updates the database on a regular basis. In short, the database administrator has the responsibility of the whole database and to maintain it in an optimal & stable state.

20) In general, a file is basically a collection of all related_____.

A. Rows & Columns
B. Fields
C. Database
D. Records

Answer: D

Explanation: Whenever we have some related data, information or records, we collect all those related data (or records), put them together, store them in one place, and give that collection a name that is known as a file.

21) The term "Data" refers to:

A. The electronic representation of the information(or data)
B. Basic information
C. Row Facts and figures
D. Both A and C

Answer: C

Explanation: In general, the term "data" refers to the row facts and figure, whereas the information referred to as the data, which is really important for someone or a particular person. Therefore the correct answer is C.

22) Rows of a relation are known as the _____.

a. Degree
b. Tuples
c. Entity
d. All of the above

Answer: D

Explanation: In SQL, the relation is represented by a table, and a table is a collection of rows and columns. Therefore the collection of rows & columns is called the table, whereas a table is known as the relation in the SQL. So in a relation (or we can say table), rows are called the tuples. So, the correct answer will be tuples.

23) Which of the following refers to the number of tuples in a relation?

a. Entity
b. Column
c. Cardinality
d. None of the above

Answer: C
Explanation: Cardinality refers to the number of tuples of relation because cardinality represents the number of tuples in a relation.

To understand it in more detail, consider the following given example:

Suppose we have a relation (or table) that contains 30 tuples (or Rows) and four columns, so the cardinality of our relation will be 30.

24) Which one of the following is a type of Data Manipulation Command?

A. Create
B. Alter
C. Delete
D. All of the above

Answer: C

Explanation: In data manipulation language, the command like select, insert, update, and delete is used to manipulate the information (or data, records), for example create a table, update table delete table, etc. Therefore, the correct answer is C.

25) Which of the following command is a type of Data Definition language command?

A. Create
B. Update
C. Delete
D. Merge

Answer: A

Explanation: The Data definition language is generally used to maintain or define the structure of the database. For example, creating a table, drop table, alter table. In short, we can say that the command of data definition languages is used to work on the table's schemas inside the database.

26) Which of the following is a top-down approach in which the entity's higher level can be divided into two lower sub-entities?

A. Aggregation
B. Generalization
C. Specialization
D. All of the above

Answer: C

Explanation: In specialization, the top-down approach is used, and it is apposite to the generalization.

In the specialization, the higher-level entity can be divided into sub lower entities. It is generally used for identifying the subset of an entity set which share the distinguishing characteristics.

To understand it more clearly, consider the following example:

Suppose you have an entity, e.g., A vehicle. So through the specialization, you can be divided further into sub-entities like two-wheelers and four-wheelers.

Therefore, the correct answer is C.

27) In which one of the following, the multiple lower entities are grouped (or combined) together to form a single higher-level entity?

A. Specialization
B. Generalization
C. Aggregation
D. None of the above

Answer: B
Explanation:
The bottom-up approach is used in the generalization. The several lower-level sub-entities are grouped together to make an individual higher-level entity. In short, we can say that it is totally the opposite of specialization. To understand it more clearly, consider the following example:
Example
Suppose you have several lower entities like bus, car, motorbike etc. So, in order to make a more generalize (or higher level) entity, you can combine them under a new higher-level entity such as a vehicle.

28) In a relation database, every tuples divided into the fields are known as the_____.

A. Queries
B. Domains
C. Relations
D. All of the above

Answer: B
Explanation: In a database, the number of rows inside a table is known as tuples, and if we further divide those tuples (or rows) into those fields, they become the domains. So the correct answer will be B.

29) The term "TCL" stands for_____.

A. Ternary Control Language
B. Transmission Control Language
C. Transaction Central Language
D. Transaction Control Language

Answer: D
Explanation: The term "TCL" refers to the Transaction Control Language, which is another language just like the "DDL" and "DML". The commands like commit, save point, rollback come under the TCL used to control the transactions. Therefore the correct answer will be D.

30) In the relational table, which of the following can also be represented by the term "attribute"?

A. Entity
B. Row
C. Column
D. Both B &C

Answer: C

Explanation: In the database, the number of rows inside a table is called the tuples, and the numbers of columns are known as the attributes. Therefore the correct answer is C.

31) Which of the following refers to the number of attributes in a relation?

A. Degree
B. Row
C. Column
D. All of the above

Answer: A

Explanation: The column inside the table is called the attribute, and the total number of attributes inside the table is called the degree. So, here as we can see, degree refers to the number of attributes in a relation. Therefore the correct answer is C.

32) Which of the following is used in the application programs to request data from the database management system?

A. Data Manipulation language
B. Data Definition Language
C. Data Control Language
D. All of the above

Answer: A

Explanation: To fetch data from the database management system, generally, the "select" statement is used. Therefore, the Data Manipulation Language is used in the application programs while requesting the data from the database management system.

33) Which one of the following command is used to delete the existing row in a table?

A. Delete
B. Update
C. Insert
D. None of the above

Answer: A

Explanation: To delete an existing row in a table the generally, the "delete" command is used. The "delete" command is one of the commands that belong to the Data manipulation language.

34) Which of the following commands is used to save any transaction permanently into the database?

A. Commit
B. Rollback
C. Savepoint
D. None of the above

Answer: A

Explanation: The Transaction Control Language is used while working with the transactions. To save any transaction permanently into the database generally, the "commit" command is used, by which any changes get reflected permanently into the database, and they become irreversible.

35) Which one of the following commands is used for removing (or deleting) a relation forms the SQL database?

A. Delete
B. Drop
C. Remove
D. All of the above

Answer: B
Explanation: To removing (or deleting) a relation, the "drop" command is used instead of delete because here we are working on the objects of the database. So, to maintain the objects of a database, the Data definition language is used. Therefore the "drop" command is used to delete a relation form a database instead of using the "delete" command.

36) Which one of the following commands is used to restore the database to the last committed state?

A. Savepoint
B. Rollback
C. Commit
D. Both A & B

Answer: B

Explanation: As we all know that while working with the Transactions, the Transaction Control Language is used. To restore the database to the last committed state (or to undo the latest changes), the "rollback" command is used that belongs to the Transaction Control Language.

37) The database management system can be considered as the collection of _____ that enables us to create and maintain the database.

A. Translators
B. Programs
C. Keys
D. Language activity

Answer: B

Explanation: The Database management system can also considered as the set of programs that enables users to create and maintain the database.

38) The term "DFD" stands for?

a. Data file diagram
b. Data flow document
c. Data flow diagram
d. None of the above

Answer: C

Explanation: The term"DFD" stands for the Data Flow Diagram, and to represent the flow of the data(or information), the data flow diagram is used. The data flow diagram also helps in understanding how the data is managed in the application. Therefore the correct answer is C.

39) Which of the following refers collection of the information stored in a database at a specific time?

A. Independence
B. Instance of the database
C. Schema
D. Data domain

Answer: B

Explanation: The collection of data (or information) stored in a database at a particular moment is known as the instance of the database. Therefore the correct answer is B.

40) The term "SQL" stands for

A. Standard query language
B. Sequential query language
C. Structured query language
D. Server-side query language

Answer: C

Explanation: The term "SQL" stands for the structured query language, which is one of the most widely, used programming languages for relational databases. It can also be used for managing and organizing data in all sorts of systems in which different data relationships exist. Therefore, the correct answer is C.

41) The term "Data independence" refers to____

A. Data is defined separately and not included in the programs
B. Programs are not dependent on the logical attributes of the data
C. Programs are not dependent on the physical attributes of the data
D. Both B & C

Answer:

Explanation: The term "Data independence" refers that the program should not be dependent on either the logical attributes of data or physical attributes of data.

42) What is the relation calculus?

A. It is a kind of procedural language
B. It is a non-procedural language
C. It is a high-level language
D. It is Data Definition language

Answer: B

Explanation: In database management systems, relation calculus is a type of non-procedural query language that describes what data needs to be retrieved. However, it does not explain how to retrieve the data.

43) Which one of the following refers to the total view of the database content?

A. Conceptual view
B. Physical view
C. Internal view
D. External view

Answer: A

Explanation: The conceptual view refers to the total view of the content available in the database. Therefore the correct answer is A.

44) For what purpose the DML is provided?

A. Addition of new structure in the database
B. Manipulation & processing of the database
C. Definition of the physical structure of the database system
D. All of the above

Answer: B

Explanation: The term "DML" refers to the data manipulation language, which is commonly used to perform basic operations such as insert data, delete, and update data in a database. So the correct answer will be B.

45) The term "ODBC" stands for_____

A. Oral database connectivity
B. Oracle database connectivity
C. Open database connectivity
D. Object database connectivity

Answer: C

Explanation: The term "ODBC" refers to the Open Database Connectivity that is a SQL based programming interface introduced by Microsoft.

46) The architecture of a database can be viewed as the _____

A. One level
B. Two-level
C. Three-level
D. Four level

Answer: C

Explanation: A database's architecture can be viewed as the three levels of abstraction that are named as the internal level, external level, and the conceptual level. Therefore the correct answer is C.

47) In the relation model, the relation are generally termed as _____

A. Tuples
B. Attributes
C. Rows
D. Tables

Answer: D

Explanation: In the relation model, the relations are also referred to as the tables because the relations are considered as the technical name of the table. So the correct answer is D.

48) The Database Management Query language is generally designed for the _____

A. Support end-users who use English like commands
B. Specifying the structure of the database
C. Support in the development of the complex applications software
D. All of the above

Answer: D

Explanation: The database management query language is generally designed by keeping in mind that it must support the end-users who are familiar with the English-like commands. It should also boost the process of development of the complex applications software and helps in specifying the structure of the database.

49) Which of the following keys is generally used to represents the relationships between the tables?

A. Primary key
B. Foreign key
C. Secondary key
D. None of the above

Answer: B

Explanation: To represent the relationships between the various tables in the database, generally, the foreign key is used. Therefore the correct answer is the foreign key.

50) Which of the following levels is considered as the level closed to the end-users?

A. Internal Level
B. External Level
C. Conceptual Level
D. Physical Level

Answer: B

Explanation: The database's external level is the one and only level that is considered the closest level to the end-users. So the correct answer will be the B.

51) A computer security protocol for logging-in can be considered as the example of the _____ component of an information system.

A. Data
B. Software
C. Procedure
D. Hardware

Answer: C

Explanation: A computer security protocol for logging-in can be considered as the procedure component of an information system. Therefore, the correct answer is C.

52) Which one of the following keyword is used to find out the number of values in a column?

A. TOTAL
B. COUNT
C. SUM
D. ADD

Answer: B

Explanation: The "COUNT" keyword is used to find the total number of values inside a column. So, whenever a user wants to find the total values in a column, he can use the keyword "COUNT".

53) Which one of the following is commonly used to define the overall design of the database?

A. Application program
B. Data definition language
C. Schema
D. Source code

Answer: C

Explanation: In order to define the overall design of the database, generally, the schema is used. Therefore, the correct answer is C.

54) Which one of the following commands is used to modify a column inside a table?

a. Drop
b. Update
c. Alter
d. Set

Answer: C

Explanation: To make manipulations in a column of a specific table, the "alter" command is used. To understand it more clearly, consider the following example:

Database Management System MCQ (Multiple Choice Questions)

1. What is the full form of DBMS?
a) Data of Binary Management System
b) Database Management System
c) Database Management Service
d) Data Backup Management System

2. What is a database?
a) Organized collection of information that cannot be accessed, updated, and managed
b) Collection of data or information without organizing
c) Organized collection of data or information that can be accessed, updated, and managed
d) Organized collection of data that cannot be updated

3. What is DBMS?
a) DBMS is a collection of queries
b) DBMS is a high-level language
c) DBMS is a programming language
d) DBMS stores, modifies and retrieves data

4. Who created the first DBMS?
a) Edgar Frank Codd
b) Charles Bachman
c) Charles Babbage
d) Sharon B. Codd

5. Which type of data can be stored in the database?
a) Image oriented data
b) Text, files containing data
c) Data in the form of audio or video
d) All of the above

6. In which of the following formats data is stored in the database management system?
a) Image
b) Text
c) Table
d) Graph

7. Which of the following is not a type of database?
a) Hierarchical
b) Network
c) Distributed
d) Decentralized

8. Which of the following is not an example of DBMS?
a) MySQL
b) Microsoft Acess
c) IBM DB2
d) Google

9. Which of the following is a feature of DBMS?
a) Minimum Duplication and Redundancy of Data
b) High Level of Security
c) Single-user Access only
d) Support ACID Property

10. Which of the following is a feature of the database?
a) No-backup for the data stored
b) User interface provided
c) Lack of Authentication
d) Store data in multiple locations

11. Which of the following is not a function of the database?
a) Managing stored data
b) Manipulating data
c) Security for stored data
d) Analysing code

12. Which of the following is a function of the DBMS?
a) Storing data
b) Providing multi-users access control
c) Data Integrity
d) All of the above

13. Which of the following is a component of the DBMS?
a) Data
b) Data Languages
c) Data Manager
d) All of the above

14. Which of the following is known as a set of entities of the same type that share same properties, or attributes?
a) Relation set
b) Tuples
c) Entity set
d) Entity Relation model

15. What is information about data called?
a) Hyper data
b) Tera data
c) Meta data
d) Relations

16. What does an RDBMS consist of?
a) Collection of Records
b) Collection of Keys
c) Collection of Tables
d) Collection of Fields

17. The values appearing in given attributes of any tuple in the referencing relation must likewise occur in specified attributes of at least one tuple in the referenced relation, according to _____ integrity constraint.
a) Referential
b) Primary
c) Referencing
d) Specific

18. _____ is a hardware component that is most important for the operation of a database management system.
a) Microphone
b) High speed, large capacity disk to store data
c) High-resolution video display
d) Printer

19. The DBMS acts as an interface between _____ and _____ of an enterprise-class system.
a) Data and the DBMS
b) Application and SQL
c) Database application and the database
d) The user and the software

20. The ability to query data, as well as insert, delete, and alter tuples, is offered by _____
a) TCL (Transaction Control Language)
b) DCL (Data Control Language)
c) DDL (Data Definition Langauge)
d) DML (Data Manipulation Langauge)

21. _____ is a set of one or more attributes taken collectively to uniquely identify a record.
a) Primary Key
b) Foreign key
c) Super key
d) Candidate key

22. Which command is used to remove a relation from an SQL?
a) Drop table
b) Delete
c) Purge
d) Remove

23. Which of the following set should be associated with weak entity set for weak entity to be meaningful?
a) Neighbour set
b) Strong entity set
c) Owner set
d) Identifying set

24. Which of the following command is correct to delete the values in the relation teaches?
a) Delete from teaches;
b) Delete from teaches where Id ='Null';
c) Remove table teaches;
d) Drop table teaches;

25. Procedural language among the following is _____
a) Domain relational calculus
b) Tuple relational calculus
c) Relational algebra
d) Query language

26. _____ operations do not preserve non-matched tuples.
a) Left outer join
b) Inner join
c) Natural join
d) Right outer join

27. Which forms have a relation that contains information about a single entity?
a) 4NF
b) 2NF
c) 5NF
d) 3NF

28. The top level of the hierarchy consists of _____ each of which can contain _____.
a) Schemas, Catalogs
b) Schemas, Environment
c) Environment, Schemas
d) Catalogs, Schemas

29. _____ indicates the maximum number of entities that can be involved in a relationship.
a) Greater Entity Count
b) Minimum cardinality
c) Maximum cardinality
d) ERD

30. The user IDs can be added or removed using which of the following fixed roles?
a) db_sysadmin
b) db_accessadmin
c) db_securityadmin
d) db_setupadmin

31. Why the following statement is erroneous?

```
SELECT dept_name, ID, avg (salary)
FROM instructor
GROUP BY dept_name;
```

a) Dept_id should not be used in group by clause
b) Group by clause is not valid in this query
c) Avg(salary) should not be selected
d) None

32. The traditional storage of data organized by the customer, stored in separate folders in filing cabinets is an example of _____ type of 'database' management system.
a) Object-oriented database management system
b) Relational database management system
c) Network database management system
d) Hierarchical database management system

33. After groups have been established, SQL applies predicates in the _____ clause, allowing aggregate functions to be used.
a) Where
b) Having
c) Group by
d) With

34. Which of the following is not the utility of DBMS?
i) Backup ii) Loading iii) Process Organization iv) File organization
a) i, ii, and iv only
b) i, ii and iii only
c) i, iii and iv only
d) All i, ii, iii, and iv

35. What does a foreign key combined with a primary key create?
a) Network model between the tables that connect them
b) Parent-Child relationship between the tables that connects them
c) One to many relationship between the tables that connects them
d) All of the mentioned

36. Which of the following is correct according to the technology deployed by DBMS?
a) Pointers are used to maintain transactional integrity and consistency
b) Cursors are used to maintain transactional integrity and consistency
c) Locks are used to maintain transactional integrity and consistency
d) Triggers are used to maintain transactional integrity and consistency

37. Which of the following is correct regarding the file produced by a spreadsheet?
a) can be used as it is by the DBMS
b) stored on disk in an ASCII text format
c) all of the mentioned
d) none of the mentioned

38. What is the function of the following command?

```
Delete from r where P;
```

a) Clears entries from relation
b) Deletes relation
c) Deletes particular tuple from relation
d) All of the mentioned

39. _____ resembles Create view.
a) Create table . . . as
b) Create view as
c) Create table . . .like
d) With data

40. The query specifying the SQL view is said to be updatable if it meets which of the following conditions?
a) select clause contains relation attribute names but not have expressions, aggregates, or distinct specification
b) from clause has 1 relation
c) query does not have group by or having clause
d) All of the mentioned

41. When the “ROLLUP” operator for expression or columns within a “GROUP BY” clause is used?
a) Find the groups that make up the subtotal in a row
b) Create group-wise grand totals for the groups indicated in a GROUP BY clause
c) Group expressions or columns specified in a GROUP BY clause in one direction, from right to left, for computing the subtotals
d) To produce a cross-tabular report for computing subtotals by grouping phrases or columns given within a GROUP BY clause in all available directions

42. Which of the following is the best way to represent the attributes in a large db?
a) Dot representation
b) Concatenation
c) Relational-and
d) All of the mentioned

43. Which of the following is the subset of SQL commands used to manipulate Oracle Structures, including tables?
a) Data Described Language
b) Data Retrieval Language
c) Data Manipulation Language
d) Data Definition Language

44. Which of the following functions construct histograms and use buckets for ranking?
a) Ntil()
b) Newtil()
c) Rank()
d) All of the mentioned

45. _____ command is used in SQL to issue multiple CREATE TABLE, CREATE VIEW and GRANT statements in a single transaction.
a) CREATE CLUSTER
b) CREATE PACKAGE
c) CREATE SCHEMA
d) All of the mentioned

46. Which of the following key is required in to handle the data when the encryption is applied to the data so that the unauthorised user cannot access the data?
a) Primary key
b) Authorised key
c) Encryption key
d) Decryption key

47. Which of the following is known as the process of viewing cross-tab with a fixed value of one attribute?
a) Dicing
b) Pivoting
c) Slicing
d) Both Pivoting and Dicing

48. For designing a normal RDBMS which of the following normal form is considered adequate?
a) 4NF
b) 3NF
c) 2NF
d) 5NF

49. Which of the following is popular for applications such as storage of log files in a database management system since it offers the best write performance?
a) RAID level 0
b) RAID level 1
c) RAID level 2
d) RAID level 3

50. Which of the following represents a query in the tuple relational calculus?
a) { }{P(t) | t }
b) {t | P(t)}
c) t | P() | t
d) All of the mentioned

51. The oldest DB model is _____
a) Network
b) Physical
c) Hierarchical
d) Relational

52. Evaluate the statements issued by the DBA in the given sequence if OE and SCOTT are the users and the ORDERS table is owned by OE.

```
CREATE ROLE r1;
GRANT SELECT, INSERT ON oe. orders TO r1;
GRANT r1 TO scott;
GRANT SELECT ON oe. orders TO scott;
REVOKE SELECT ON oe.orders FROM scott;
```

What would be the outcome after executing the statements?
a) The REVOKE statement would give an error because the SELECT privilege has been granted to the role R1
b) The REVOKE statement would remove the SELECT privilege from SCOTT as well as from the role R1
c) SCOTT would be able to query the OE.ORDERS table
d) SCOTT would not be able to query the OE.ORDERS table

53. Which of the following establishes a top-to-bottom relationship among the items?
a) Relational schema
b) Network schema
c) Hierarchical schema
d) All of the mentioned

54. A major goal of the db system is to minimize the number of block transfers between the disk and memory. Which of the following helps in achieving this goal?
a) Secondary storage
b) Storage
c) Catalog
d) Buffer

55. What happens if a piece of data is stored in two places in the db?
a) Storage space is wasted & Changing the data in one spot will cause data inconsistency
b) In can be more easily accessed
c) Changing the data in one spot will cause data inconsistency
d) Storage space is wasted

56. The logical design, and the snapshot of the data at a given instant in time is known as?
a) Instance & Relation
b) Relation & Schema
c) Domain & Schema
d) Schema & Instance

MCQ on DBMS (Database Management System)

1) Which of the following is typically employed for duties like building the relations' organisational structure and deleting relations?

1. DML(Data Manipulation Language)
2. Query
3. Relational Schema
4. DDL(Data Definition Language)

Answer: (4) DDL(Data Definition Language)

2) Which of these fixed roles may we utilise to add or remove user IDs?

a) db_setupadmin
b) db_securityadmin
c) db_accessadmin
d) db_sysadmin

Answer: (c) db_accessadmin

3) How do you define one-to-many relationships?

1. One class may have many teachers
2. One teacher can have many classes
3. Many classes may have many teachers
4. Many teachers may have many classes

Answer: (2) One teacher can have many classes

4) Which of the following allows you to insert, remove, and alter tuples in the database as well as query information from it?

1. DML(Data Manipulation Language)
2. DDL(Data Definition Language)
3. Query
4. Relational Schema

Answer: (1) DML(Data Manipulation Language)

5. How do we substitute another sign for the except?

a) ~
b) ¬
c) V
d) ^

Answer: (b) ¬

6. What other term would you use to describe a weak entity?
a. Dominant
b. Owner
c. Child
d. All of the above
Answer: (c) Child

7. Assume that relation X (M, N, O, P, Q) has the functional dependencies shown below:
MNO -> PQ and
P -> MN
There would be the following total superkeys for X:
a. 12
b. 10
c. 7
d. 2
Answer: (b) 10

8. Fifth Regular form is focused on:
a. Join dependency
b. Domain-key
c. Multivalued dependency
d. Functional dependency
Answer: (a) Join dependency

9. A password is not necessary for the ____ system to access the internet.
a. Response
b. Challenge-response
c. Manipulation
d. Readable
Answer: (b) Challenge-response

10. A log switch can be compelled by employing:
a. ALTER SYS LOG FILES
b. ALTER SYSTEM SWITCH LOGS
c. ALTER SYSTEM LOG
d. ALTER SYSTEM SWITCH LOGFILE
Answer: (d) ALTER SYSTEM SWITCH LOGFILE

11. When bouncing back from a failure:
a. Each pair of physical bricks is examined.
b. A specific pair of physical blocks are examined.
c. The initial physical block pair is examined.
d. none of the above
Answer: (a) Each pair of physical bricks is examined.

12. Utilising optical disk technology are:
a. RAID
b. A laser beam
c. DAT
d. Helical scanning
Answer: (a) RAID

13. In a B+ tree, the node that points in the direction of another node is called:
a. External node
b. Leaf node
c. Internal node
d. Final node
Answer: (c) Internal node

14) The term"_____" refers to a substantial accumulation of information or data gathered from numerous sources.

1. Data Management
2. Data Mining
3. Data Warehouse
4. Both B and C

Answer: (3) Data Warehouse

15) Which of the following techniques can be applied to extract or filter data and information from the data warehouse?

1. Data redundancy
2. Data recovery tool
3. Data mining
4. Both B and C

Answer: (3) Data mining

16) Which of the following describes duplicates of the same data (or information) taking up memory space in different locations?

1. Data Repository
2. Data Inconsistency
3. Data Mining
4. Data Redundancy

Answer: (4) Data Redundancy

17. The protocol locking in crab runs like follows:

a. down the tree, back up
b. up the tree, back down
c. down the tree, releases
d. up the tree, releases

Answer: (a) down the tree, back up

18. The first commercially available microprocessor chip had the following name:

a. Intel 4004
b. Intel 639
c. Intel 308
d. Motorola 33

Answer: (a) Intel 4004

19. The simplest approach for us to change control is when the old primary transmits _____ to the old backup site.

a. Redo logs
b. Primary Logs
c. Undo Logs
d. All of the above

Answer: (b) Primary Logs

20. The complexity of a linear search algorithm would be:

a. O(n2)
b. O(n log n)
c. O(n)
d. O(log n)

Answer: (c) O(n)

21) The phrase “Data” describes:

1. Information is represented electronically (or data)
2. Basic information
3. Row Facts and figures
4. Both A and C

Answer: (3) Row Facts and figures

22) The _____ of a connection refers to its rows.

1. Degree
2. Tuples
3. Entity
4. All of the above

Answer: (4) All of the above

23) Which of the following phrases describes how many tuples there are in a relation?

1. Entity
2. Column
3. Cardinality
4. None of the above

Answer: (3) Cardinality

24) Which of the following is a sort of command for data manipulation?

1. Create
2. Alter
3. Delete
4. All of the above

Answer: (3) Delete

25) Which of the aforementioned instructions falls under the category of Data Definition language commands?

1. Create
2. Update
3. Delete
4. Merge

Answer: (1) Create

26) Which of the following describes a top-down strategy where the higher level of the entity can be split into two lower sub-entities?

1. Aggregation
2. Generalisation
3. Specialization
4. All of the above

Answer: (3) Specialization

27) Which of the following best describes how various lesser entities are gathered (or integrated) into one higher-level entity?

1. Specialization
2. Generalization
3. Aggregation
4. None of the above

Answer: (2) Generalization

28) Every tuple that has been partitioned into fields in a relational database is referred to as the_____.

1. Queries
2. Domains
3. Relations
4. All of the above

Answer: (2) Domains

29) TCL is an acronym for

1. Ternary Control Language
2. Transmission Control Language
3. Transaction Central Language
4. Transaction Control Language

Answer: (4) Transaction Control Language

30) Which of the following can also be referred to as a “attribute” in a relational table?

1. Entity
2. Row
3. Column
4. Both B &C

Answer: (3) Column

31) Which of the following describes how many attributes there are in a relation?

1. Degree
2. Row
3. Column
4. All of the above

Answer: (1) Degree

32) Which of the following is utilized by application applications to ask the database management system for information?

1. Data Manipulation language
2. Data Definition Language
3. Data Control Language
4. All of the above

Answer: (1) Data Manipulation language

33) Which of the subsequent commands should you use to delete an existing row from a table?

1. Delete
2. Update
3. Insert
4. None of the above

Answer: (1) Delete

34) Which of the subsequent instructions is used to permanently store any transaction into the database?

1. Commit
2. Rollback
3. Savepoint
4. None of the above

Answer: (1) Commit

35) What command is used to remove (or delete) a relation from the SQL database?

1. Delete
2. Drop
3. Remove
4. All of the above

Answer: (2) Drop

36) Which of the subsequent commands is used to return the database to the condition it was in just before it was committed?

1. Savepoint
2. Rollback
3. Commit
4. Both A & B

Answer: (2) Rollback

37) When it comes to creating and maintaining databases, the database management system may be thought of as a collection of .

1. Translators
2. Programs
3. Keys
4. Language activity

Answer: (2) Programs

38) What does the phrase "DFD" mean?

1. Data file diagram
2. Data flow document
3. Data flow diagram
4. None of the above

Answer: (3) Data flow diagram

39) Which of the following describes the gathering of data that is kept in a database at a particular time?

1. Independence
2. Instance of the database
3. Schema
4. Data domain

Answer: (2) Instance of the database

40) SQL is the acronym for

1. Standard query language
2. Sequential query language
3. Structured query language
4. Server-side query language

Answer: (3) Structured query language

41) Data independence is referred to as...

a. Programs do not contain any of the defined data.
b. The logical characteristics of the data are independent of programs.
c. Programs are independent of the data's physical characteristics.
d. Both B & C

Answer: (4) Both B & C

42) How does relation calculus work?

1. It is a kind of procedural language
2. It is a non-procedural language
3. It is a high-level language
4. It is Data Definition language

Answer: (2) It is a non-procedural language

43) Which of the following describes the entire database's content?

1. Conceptual view
2. Physical view
3. Internal view
4. External view

Answer: (1) Conceptual view

44) What function does the DML serve?

1. Addition of new structure in the database
2. Manipulation & processing of the database
3. Define the physical components of the database system.
4. All of the above

Answer: (2) Manipulation & processing of the database

45) A database's architecture can be thought of as the .

1. Oral database connectivity
2. Oracle database connectivity
3. Open database connectivity
4. Object database connectivity

Answer: (3) Open database connectivity

46) In the relation model, the relations are frequently referred to as _____.

1. One level
2. Two-level
3. Three-level
4. Four level

Answer: (3) Three-level

47) The relations are typically referred to as _____ in the relation model.

1. Tuples
2. Attributes
3. Rows
4. Tables

Answer: (4) Tables

48) The general purpose of the Database Management Query language is the _____.

1. Support end-users who use English like commands
2. Specifying the structure of the database
3. Support with the creation of sophisticated software applications
4. All of the above

Answer: (4) All of the above

49) Which of the following keys represents the connections between the tables most frequently?

1. Primary key
2. Foreign key
3. Secondary key
4. None of the above

Answer: (2) Foreign key

50) Which level among the following is regarded as being closed to end users?

1. Internal Level
2. External Level
3. Conceptual Level
4. Physical Level

Answer: (2) External Level

What is a Database?

- A database is an organized collection of data, general stores, and accessed electronically from a computer system.

What is DBMS?

- The Database Management System(DBMS) is the software that interacts with end-users, applications, and the database itself to capture and analyze the data.
- The DBMS software additionally encompasses the core facilities provided to administer the database. The sum total of the database, the DBMS, and the associated applications can be referred to as a "database system".

Problems with File System

- Data redundancy and inconsistency.
- Difficulty in accessing data
- Data isolation
- Integrity problem
- Atomicity problem
- Concurrent access anomalies

Instance and Schemas

- The collection of information stored in the database at a particular moment is called an instance of the database.
- The overall design of the database is called the database schema.

Types of Databases

- Commercial database
- Multimedia database
- Deductive database
- Temporal database
- Geological Info System

Characteristics of Database Management System

- Provides security and removes redundancy
- Self-describing nature of a database system
- Insulation between programs and data abstraction
- Support of multiple views of the data
- Sharing of data and multiuser transaction processing
- Database Management Software allows entities and relations among them to form tables.
- It follows the ACID concept (Atomicity, Consistency, Isolation, and Durability).

What is Transaction?

- To remove this partial execution problem, we increase the level of atomicity and bundle all the instructions of a logical operation into a unit called a transaction.
- So, formally - 'A transaction is a set of logically related instructions to perform a logical unit of work'.

What is a Schedule?

- When two or more transactions are executed together or one after another, then they can be bundled up into a higher unit of execution called schedule.
- A **schedule** of **N** transactions T1, T2, T3...TN, is an ordering of the operations of the transactions. Operations from different transactions can be interleaved in the scheduled S.
- However, the schedule for a set of transactions must contain all the instructions of those transactions, and for each transaction T, that participates in the schedule S, the operation of T, in S must appear in the same order in which they occur in T.

Basics of RDBMS

- The domain is a set of atomic values.
- By atomic we mean that each value in the domain is indivisible as far as the formal relational model is concerned.
- A common method of specifying a domain is to specify a data type from which the data forming the domain are drawn.
- Table(Relation): A relation is a set of tupes/rows/entities/records.
- Tuple: Each row of a relation/table is called a tuple.
- Degree: Number of columns/attributes of a relation.
- Cardinality: Number of rows/types/record of a relational instance.

Properties of RDBMS

- Cells contain atomic values.
- Values in a column are of the same kind.
- Each row is unique.
- Each column has a unique name
- No two tables can have the same name in a relational schema.
- The sequence of rows is insignificant.
- The sequence of columns is insignificant.

1. Which of the following is the full form of DDL?
    a. Data definition language
    b. Data derivation language
    c. Dynamic data language
    d. Detailed data language

2. Which of the following is the property of transaction that protects data from system failure?
    a. Atomicity
    b. Isolation
    c. Durability
    d. Consistency

3. Which of the following is preserved in execution of transaction in isolation?
    a. Atomicity
    b. Isolation
    c. Durability
    d. Consistency

4. Which normalization form is based on the transitive dependency?
1NF
2NF
3NF
BCNF

5. Which is the lowest level of abstraction that describes how the data are actually stored?
    a. Physical
    b. Abstract
    c. View
    d. User

6. For performing tasks like creating the structure of the relations, deleting relation, which of the following is used?
    a. Data definition language
    b. Data derivation language
    c. Dynamic data language
    d. Detailed data language

7. What is rows of a relation known as?
   a. Degree
   b. Entity
   c. Tuple
   d. None

8. Which of the following is a command of DDL?
   a. Alter
   b. Delete
   c. Create
   d. All of the above

9. During transaction before commit which of the following statement is done automatically in case of shutdown?
   a. Rollback
   b. Commit
   c. View
   d. Flashback

10. Which of the following is the full form of TCL?
   a. Ternary control language
   b. Transaction control language
   c. Transaction central language
   d. Transmission control language

11. Which of the following SQL command is used for removing (or deleting) a relation form the database?
   a. Drop
   b. Delete
   c. Rollback
   d. Remove

12. What is DBMS?
   a. Collection of many programs to access data
   b. Collection of interrelated data
   c. Collection of commands
   d. All

13. Rectangles in ER diagram represents?
    a. Tables
    b. Attributes
    c. Tuples
    d. Entity sets

14. Select the correct definition of relation.
    a. Subset of a cartesian product of list of domains
    b. Subset of a cartesian product of list of tuple
    c. Subset of a cartesian product of list of attributes
    d. Subset of a cartesian product of list of relations

15.
Which of the following allows to uniquely identify a tuple?
    a. Schema
    b. Attribute
    c. Super key
    d. Domain

16. Which of the following is known as minimal super key?
    a. Primary key
    b. Candidate key
    c. Foreign key
    d. None

17. Select the relational algebra operations.
    a. Union
    b. Select
    c. Rename
    d. All of the above

18. Which is AS clause used for?
    a. Rename
    b. Selection
    c. Join
    d. Projection

19. How many levels are there in architecture of database?
    a. 2
    b. 3
    c. 4
    d. 5

20. Which data structure is used in Hierarchical model records?
    a. Graph
    b. Tree
    c. Linked list
    d. Stacks

21. How is ER diagram represented?
    a. Circle
    b. Ellipse
    c. Triangle
    d. Square

22. A relational database developer refers to a record as?
    a. Attribute
    b. Tuple
    c. Relation
    d. None

23. Which normal form deals with multivalued dependency?
    a. 1NF
    b. 2NF
    c. 3NF
    d. 4NF

24. Which of the following is not a SQL command?
    a. DELETE
    b. ORDER BY
    c. SELECT
    d. WHERE

25. Identify the concurrency-based protocol?
    a. Lock based protocol
    b. Two phase locking protocol
    c. Timestamp ordering protocol
    d. All

26. Select the correct foreign key constraint?
    a. Referential integrity
    b. Entity integrity
    c. Domain integrity
    d. None

27. What is the name of the query that is placed within a WHERE or HAVING clause of another query?

a. Multi query
b. Subquery
c. Super query
d. Master query

28. Which command is used to remove a stored function from the database?

a. DROP
b. DELETE
c. ERASE
d. REMOVE

29. After which operation is the modify operation done?

a. Look-up
b. Insert
c. Delete
d. All

30. Which of the following command is used to change data in table?

a. INSERT
b. UPDATE
c. MERGE
d. NONE

31. Which of the following normal forms contains information about a single entity?

a. 1NF
b. 2NF
c. 3NF
d. 4NF

32. Which of the following can replace the below query?

```
SELECT name, course_id
FROM instructor, teaches
WHERE instructor_ID= teaches_ID;
```

a. Select name, course_id from instructor natural join teaches;
b. Select name,course_id from teaches,instructor where instructor_id=course_id;
c. Select name, course_id from instructor;
d. Select course_id from instructor join teaches;

33. Which of the following is the full form of NTFS?
    a. New Tree File System
    b. New Technology FIle System
    c. New Table File System
    d. Both B and C

34. What is the number of tuples of a relation known as?
    a. Column
    b. Cardinality
    c. Entity
    d. None

35. Select the correct definition of Relational calculus?
    a. It is a high-level language
    b. It is a procedural language
    c. It is a non-procedural language
    d. It is a data definition language

36. Total view of a database is known as?
    a. Physical view
    b. Internal view
    c. Conceptual view
    d. External view

37. Select the definition of the correct key which is used to represent relation between two tables?
    a. Candidate key
    b. Foreign key
    c. Primary key
    d. Super key

38. Select the correct command to find the number of values in a column.
    a. ADD
    b. SUM
    c. TOTAL
    d. COUNT

39. Select the correct command to modify a column in a table.
    a. Update
    b. Alter
    c. Drop
    d. Set

40. Select the correct properties of entities?
    a. Table
    b. Groups
    c. Attributes
    d. Switchboards

41. Primary key can be?
    a. NULL
    b. NOT NULL
    c. Both NULL and NOT NULL
    d. Depends on situation

42. To select some particular columns, which of the following command is used?
    a. PROJECTION
    b. SELECTION
    c. JOIN
    d. UNION

43. Select the correct database object which does not exist physically.
    a. Base table
    b. View
    c. Index
    d. None

44. NATURAL JOIN can also be termed as -
    a. Combination of Union and cartesian product
    b. Combination of Selection and cartesian product
    c. Combination of Projection and cartesian product
    d. None

45. Which of the following operator is used to compare a value to a list of literals values that have been specified?
    a. ANY
    b. BETWEEN
    c. IN
    d. ALL

46. Maximum children of a B-tree of order m?
    a. m/2
    b. m - 1
    c. m
    d. m + 1

47. What is a table joined with itself called?
    a. Join
    b. Self-join
    c. Outer join
    d. Equi join

48. What is the use of COUNT in SQL?
    a. Returns number of distinct value
    b. Returns total values
    c. Returns number of groups
    d. Returns number of columns

49. Select the valid SQL type.
    a. NUMERIC
    b. CHARACTER
    c. FLOAT
    d. All of the above

50. Select the correct advantages of view.
    a. Derived columns
    b. Data security
    c. Hiding of complex queries
    d. All of the above

Database Management System MCQ Set-13

Hello Friends,this particular section is well focused on the Frequently asked Database Fundamentals Multiple Choice Questions Answers in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. The users who use easy-to-use menu are called

A. Sophisticated end users

B. Naïve users

C. Stand-alone users.

D. Casual end users.

View Answer

B. Naïve users

2. Which database level is closest to the users?

A. External

B. Internal

C. Physical

D. Conceptual

View Answer

A. External

3. Which are the two ways in which entities can participate in a relationship?

A. Passive and active

B. Total and partial

C. Simple and Complex

D. All of the above

View Answer

B. Total and partial

4. The result of the UNION operation between R1 and R2 is a relation that includes

A. all the tuples of R1

B. all the tuples of R2

C. all the tuples of R1 and R2

D. all the tuples of R1 and R2 which have common columns

View Answer

D. all the tuples of R1 and R2 which have common columns

5. Which of the following is a comparison operator in SQL?

A. =

B. LIKE

C. BEtween

D. ALL

View Answer

D. ALL

6. A set of possible data values is called

A. attribute

B. degree

C. tuple

D. domain

View Answer

D. domain

7. Which of the operations constitute a basic set of operations for manipulating relational data?

A. Predicate calculus

B. Relational calculus

C. Relational algebra

D. None of the above

View Answer

C. Relational algebra

8. Which of the following is another name for weak entity?

A. Child

B. Owner

C. Dominant

D. All of the above

View Answer

A. Child

9. Which of the following database object does not physically exist?

A. base table

B. index

C. view

D. none of the above

View Answer

C. view

10. NULL is

A. the same as 0 for integer

B. the same as blank for character

C. the same as 0 for integer and blank for character

D. Not a value

View Answer

D. Not a value

Database Management System MCQ Set-12

Hello Friends,this particular section is well focused on the Frequently asked Database Multiple Choice Questions Answers in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. It is better to use files than a DBMS when there are
   A. Stringent real-time requirements.
   B. Multiple users wish to access the data.
   C. Complex relationships among data.
   D. All of the above.

View Answer

B. Multiple users wish to access the data.

2. The conceptual model is
   A. dependent on hardware.
   B. dependent on software.
   C. dependent on both hardware and software .
   D. independent of both hardware and software.

View Answer

D. independent of both hardware and software.

3. What is a relationship called when it is maintained between two entities?
   A. Unary
   B. Binary
   C. Ternary
   D. Quaternary

View Answer

B. Binary

4. Which of the following operation is used if we are interested in only certain columns of a table?
   A. Projection
   B. SELECTION
   C. UNION
   D. JOIN

View Answer

A. Projection

5. Which of the following is a valid SQL type?
   A. CHARACTER
   B. NUMERIC
   C. FLOAT
   D. All of the above

View Answer

D. All of the above

6. The RDBMS terminology for a row is

A. tuple

B. relation

C. attribute

D. degree

View Answer

A. tuple

7. Which of the following operations need the participating relations to be union compatible?

A. UNION

B. INTERSECTION

C. DIFFERENCEqq

D. All of the above

View Answer

D. All of the above

8. The full form of DDL is

A. Dynamic Data Language

B. Detailed Data Language

C. Data Definition Language

D. Data Derivation Language

View Answer

C. Data Definition Language

9. Which of the following is an advantage of view?

A. Data security

B. Derived columns

C. Hiding of complex queries

D. All of the above

View Answer

D. All of the above

10. Which of the following is a legal expression in SQL?

A. SELECT NULL FROM EMPLOYEE;

B. Select name from employee

C. Select name from employee WHERE SALARY = NULL;

D. None of the above

View Answer

B. Select name from employee

Database Management System MCQ Set-11

Hello Friends , this particular section is well focused on the Frequently asked Database Management System (DBMS) Multiple Choice Questions and Answers – MCQs in the various competitive exam. the set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. E-R model uses this symbol to represent weak entity set ?
   A. Dotted rectangle.
   B. Diamond
   C. Doubly outlined rectangle
   D. None of these

View Answer

C. Doubly outlined rectangle

2. SET concept is used in :
   A. Network Model
   B. Hierarchical Model
   C. Relational Model
   D. None of these

View Answer

A. Network Model

3. Relational Algebra is
   A. Data Definition Language
   B. Meta Language
   C. Procedural query Language
   D. None of the above

View Answer

C. Procedural query Language

4. Key to represent relationship between tables is called
   A. Primary key
   B. Secondary Key
   C. Foreign Key
   D. None of these

View Answer

C. Foreign Key

5. _____ produces the relation that has attributes of R1 and R2
   A. Cartesian product
   B. Difference
   C. Intersection
   D. Product

View Answer

A. Cartesian product

6. The file organization that provides very fast access to any arbitrary record of a file is

A. Ordered file

B. Unordered file

C. Hashed file

D. B-tree

View Answer

C. Hashed file

7. DBMS helps achieve

A. Data independence

B. Centralized control of data

C. Neither (A) nor (B)

D. both (A) and (B)

View Answer

D. both (A) and (B)

8. Which of the following are the properties of entities?

A. Groups

B. Table

C. Attributes

D. Switchboards

View Answer

C. Attributes

9. In a relation

A. Ordering of rows is immaterial

B. No two rows are identical

C. (A) and (B) both are true

D. None of these.

View Answer

C. (A) and (B) both are true

10. Which of the following is correct:

A. a SQL query automatically eliminates duplicates.

B. SQL permits attribute names to be repeated in the same relation.

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

D. None of these

View Answer

D. None of these

Database Management System MCQ Set-10

Hello Friends,this particular section is well focused on the Frequently asked Database Basic Questions and Answers in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. A subschema expresses
   A. the logical view.
   B. the physical view.
   C. the external view.
   D. all of the above

View Answer

C. the external view.

2. Count function in SQL returns the number of
   A. values
   B. distinct values.
   C. groups
   D. columns

View Answer

A. values

3. Which one of the following statements is false?
   A. The data dictionary is normally maintained by the database administrator.
   B. Data elements in the database can be modified by changing the data dictionary.
   C. The data dictionary contains the name and description of each data element.
   D. The data dictionary is a tool used exclusively by the database administrator.

View Answer

B. Data elements in the database can be modified by changing the data dictionary.

4. An advantage of the database management approach is
   A. data is dependent on programs.
   B. data redundancy increases.
   C. data is integrated and can be accessed by multiple programs
   D. None

View Answer

C. data is integrated and can be accessed by multiple programs

5. A DBMS query language is designed to
   A. support end users who use English-like commands
   B. support in the development of complex applications software.
   C. specify the structure of a database.
   D. all of the above.

View Answer

D. all of the above.

6. TrAnsaction processing is associated with everything below except

A. producing detail, summary, or exception reports.

B. recording a business activity.

C. confirming an action or triggering a response.

D. maintaining data.

View Answer

C. confirming an action or triggering a response.

7. It is possible to define a schema completely using

A. VDL and DDL.

B. DDL and DML.

C. SDL and DDL.

D. VDL and DML.

View Answer

B. DDL and DML.

8. The method of access which uses key trAnsformation is known as

A. direct

B. hash

C. random

D. sequential

View Answer

B. hash

9. Data independence meAns

A. data is defined separately and not included in programs.

B. programs are not dependent on the physical attributes of data.

C. programs are not dependent on the logical attributes of data

D. both (B) and (C).

View Answer

D. both (B) and (C).

10. The statement in SQL which allows to change the definition of a table is

A. Alter

B. Update

C. Create

D. select

View Answer

A. Alter

Database Management System MCQs Set-9

Hello Friends,this particular section is well focused on the Frequently asked Database Management System Fundamentals MCQs in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. The language which has recently become the defacto standard for interfacing application programs with relational database system is

A. Oracle
B. SQL
C. DBase
D. 4GL

View Answer

B. SQL

2. The way a particular application views the data from the database that the application uses is a

A. module
B. relational model.
C. schema
D. sub schema

View Answer

D. sub schema

3. In an E-R diagram an entity set is represent by a

A. rectangle
B. ellipse
C. diamond box.
D. circle

View Answer

A. rectangle

4. A report generator is used to

A. update files.
B. print files on paper
C. data entry
D. delete files

View Answer

B. print files on paper

5. The property / properties of a database is / are :

A. It is an integrated collection of logically related records.
B. It consolidates separate files into a common pool of data records.
C. Data stored in a database is independent of the application programs using it.
D. All of the above.

View Answer

D. All of the above.

6. The DBMS language component which can be embedded in a program is

A. The data definition language (DDL).

B. The data manipulation language (DML).

C. The database administrator (DBA).

D. A query language

View Answer

B. The data manipulation language (DML).

7. A relational database developer refers to a record as

A. a criteria

B. a relation

C. a tuple

D. an attribute

View Answer

C. a tuple

8. The relational model feature is that there

A. is no need for primary key data.

B. is much more data independence than some other database models

C. are explicit relationships among records.

D. are tables with many dimensions.

View Answer

B. is much more data independence than some other database models

9. Conceptual design

A. is a documentation technique.

B. needs data volume and processing frequencies to determine the size of the database.

C. involves modelling independent of the DBMS.

D. is designing the relational model.

View Answer

C. involves modelling independent of the DBMS.

10. The method in which records are physically stored in a specified order according to a key field in each record is

A. hash

B. direct

C. sequential

D. all of the above

View Answer

A. hash

Database Management System MCQs Set-8

Hello Friends,this particular section is well focused on the Frequently asked Database Management System Multiple Choice Questions Answers in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. In E-R diagram generalization is represented by

A. Ellipse

B. Dashed ellipse

C. Rectangle

D. Triangle

View Answer

D. Triangle

2. _____ is a virtual table that draws its data from the result of an SQL SELECT statement.

A. View

B. Synonym

C. Sequence

D. TrAnsaction

View Answer

A. View

3. The method of access which uses key trAnsformation is known as

A. Direct

B. Hash

C. Random

D. Sequential

View Answer

B. Hash

4. A table joined with itself is called

A. Join

B. Self Join

C. Outer Join

D. Equi Join

View Answer

B. Self Join

Database Management System MCQs Set-7

Hello Friends,this particular section is well focused on the Frequently asked DBMS Fundamentals MCQs in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. Natural join is equal to?
   A. Cartesian Product
   B. Combination of Union and Cartesian product
   C. Combination of selection and Cartesian product
   D. Combination of projection and Cartesian product

View Answer

D. Combination of projection and Cartesian product

2. Which one of the following is not true for a view:
   A. View is derived from other tables.
   B. View is a virtual table.
   C. A view definition is permanently stored as part of the database.
   D. View never contains derived columns.

View Answer

C. A view definition is permanently stored as part of the database.

3. A primary key if combined with a foreign key creates
   A. Parent-Child relationship between the tables that connect them.
   B. Many to many relationship between the tables that connect them.
   C. Network model between the tables that connect them.
   D. None of the above.

View Answer

A. Parent-Child relationship between the tables that connect them.

4. In E-R Diagram relationship type is represented by
   A. Ellipse
   B. Dashed ellipse
   C. Rectangle
   D. Diamond

View Answer

D. Diamond

5. A Dada manipulation command the combines the records from one or more tables is called
   A. SELECT
   B. PROJECT
   C. JOIN
   D. PRODUCT

View Answer

C. JOIN

6. To delete a particular column in a relation the command used is:

A. UPDATE

B. DROP

C. ALTER

D. DELETE

View Answer

C. ALTER

7. The _____ operator is used to compare a value to a list of literals values that have been specified

A. BETWEEN

B. ANY

C. IN

D. ALL

View Answer

A. BETWEEN

8. A logical schema

A. is the entire database

B. is a standard way of organizing information into a accessible part

C. describe how data is actually stored on disk

D. none of these

View Answer

D. none of these

9. A B-tree of order m has maximum of _____ children

A. m

B. m+1

C. m-1

D. m/2

View Answer

A. m

10. _____ function divides one numeric expression by another and returns the remainder

A. POWER

B. MOD

C. ROUND

D. REMAINDER

View Answer

B. MOD

Database Management System MCQs Set-6

1. A primary key if combined with a foreign key creates
   A. Parent-Child relationship between the tables that connect them.
   B. Many to many relationship between the tables that connect them.
   C. Network model between the tables that connect them.
   D. None of the above.

View Answer

A. Parent-Child relationship between the tables that connect them.

2. In E-R Diagram relationship type is represented by
   A. Ellipse
   B. Dashed ellipse
   C. Rectangle
   D. Diamond

View Answer

D. Diamond

3. Hierarchical model is also called
   A. Tree structure
   B. Plex Structure
   C. Normalize Structure
   D. Table Structure

View Answer

A. Tree structure

4. In E-R diagram generalization is represented by
   A. Ellipse
   B. Dashed ellipse
   C. Rectangle
   D. Triangle

View Answer

D. Triangle

5. _____ is a virtual table that draws its data from the result of an SQL SELECT statement.
   A. View
   B. Synonym
   C. Sequence
   D. TrAnsaction

View Answer

A. View

Database Management System MCQs Set-5

Hello Friends,this particular section is well focused on the DBMS Basics mcq questions for placement. the set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. The full form of DDL is
   A. Dynamic Data Language
   B. Detailed Data Language
   C. Data Definition Language
   D. Data Derivation Language

View Answer

C. Data Definition Language

2. Which of the following is an advantage of view?
   A. Data security
   B. Derived columns
   C. Hiding of complex queries
   D. All of the above

View Answer

D. All of the above

3. Which of the following is a legal expression in SQL?
   A. SELECT NULL FROM EMPLOYEE;
   B. SELECT NAME FROM EMPLOYEE;
   C. SELECT NAME FROM EMPLOYEE WHERE SALARY = NULL;
   D. None of the above

View Answer

B. SELECT NAME FROM EMPLOYEE;

4. A set of possible data values is called
   A. attribute
   B. degree
   C. tuple
   D. domain

View Answer

D. domain

5. Which of the operations constitute a basic set of operations for manipulating relational data?
   A. Predicate calculus
   B. Relational calculus
   C. Relational algebra
   D. None of the above

View Answer

C. Relational algebra

6. Which of the following is another name for weak entity?

A. Child

B. Owner

C. Dominant

D. All of the above

View Answer

A. Child

7. Which of the following database object does not physically exist?

A. base table

B. index

C. view

D. none of the above

View Answer

C. view

8. Which of the following is record based logical model?

A. Network Model

B. Object oriented model

C. E-R Model

D. None of these

View Answer

A. Network Model

9. The natural join is equal to :

A. Cartesian Product

B. Combination of Union and Cartesian product

C. Combination of selection and Cartesian product

D. Combination of projection and Cartesian product

View Answer

D. Combination of projection and Cartesian product

10. Which one of the following is not true for a view:

A. View is derived from other tables.

B. View is a virtual table.

C. A view definition is permanently stored as part of the database.

D. View never contains derived columns.

View Answer

C. A view definition is permanently stored as part of the database.

Database Management System MCQs Set-4

Hello Friends , this particular section is well focused on the DBMS objective questions and answers for Competitive Exam. the set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. Count function in SQL returns the number of
   A. values
   B. distinct values
   C. groups
   D. columns

View Answer

A. values

2. It is possible to define a schema completely using
   A. VDL and DDL.
   B. DDL and DML.
   C. SDL and DDL.
   D. VDL and DML.

View Answer

B. DDL and DML.

3. The statement in SQL which allows to change the definition of a table is
   A. Alter
   B. Update
   C. Create
   D. select

View Answer

A. Alter

4. E-R model uses this symbol to represent weak entity set ?
   A. Dotted rectangle.
   B. Diamond
   C. Doubly outlined rectangle
   D. None of these

View Answer

C. Doubly outlined rectangle

5. SET concept is used in :
   A. Network Model
   B. Hierarchical Model
   C. Relational Model
   D. None of these

View Answer

A. Network Model

6. Relational Algebra is

A. Data Definition Language .

B. Meta Language

C. Procedural query Language

D. None of the above

View Answer

C. Procedural query Language

7. The conceptual model is

A. dependent on hardware.

B. dependent on software.

C. dependent on both hardware and software .

D. independent of both hardware and software.

View Answer

D. independent of both hardware and software.

8. What is a relationship called when it is maintained between two entities?

A. Unary

B. Binary

C. Ternary

D. Quaternary

View Answer

B. Binary

9. Which of the following operation is used if we are interested in only certain columns of a table?

A. PROJECTION

B. SELECTION

C. UNION

D. JOIN

View Answer

A. PROJECTION

10. Which of the following operations need the participating relations to be union compatible?

A. UNION

B. INTERSECTION

C. DIFFERENCEqq

D. All of the above

View Answer

D. All of the above

Database Management System MCQs Set-3

Hello Friends,this particular section is well focused on the Frequently asked dbms mcq questions for placement. the set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. The way a particular application views the data from the database that the application uses is a
   A. module
   B. relational model.
   C. schema
   D. sub schema.

View Answer

D. sub schema.

2. In an E-R diagram an entity set is represent by a
   A. rectangle
   B. ellipse
   C. diamond box.
   D. circle

View Answer

A. rectangle

3. A report generator is used to
   A. update files.
   B. print files on paper.
   C. data entry.
   D. delete files.

View Answer

B. print files on paper.

4. The property / properties of a database is / are :
   A. It is an integrated collection of logically related records.
   B. It consolidates separate files into a common pool of data records.
   C. Data stored in a database is independent of the application programs using it.
   D. All of the above.

View Answer

D. All of the above.

5. The DBMS language component which can be embedded in a program is
   A. The data definition language (DDL).
   B. The data manipulation language (DML).
   C. The database administrator (DBA).
   D. A query language.

View Answer

B. The data manipulation language (DML).

6. A relational database developer refers to a record as

A. a criteria.

B. a relation.

C. a tuple.

D. an attribute.

View Answer

C. a tuple.

7. The relational model feature is that there

A. is no need for primary key data.

B. is much more data independence than some other database models.

C. are explicit relationships among records.

D. are tables with many dimensions.

View Answer

B. is much more data independence than some other database models.

8. Conceptual design

A. is a documentation technique.

B. needs data volume and processing frequencies to determine the size of the database.

C. involves modelling independent of the DBMS.

D. is designing the relational model.

View Answer

C. involves modelling independent of the DBMS.

9. The method in which records are physically stored in a specified order according to a key field in each record is

A. hash

B. direct

C. sequential

D. all of the above.

View Answer

A. hash

10. A subschema expresses

A. the logical view.

B. the physical view.

C. the external view.

D. all of the above.

View Answer

C. the external view.

Database Management System MCQs Set-2

1. In case of entity integrity, the primary key may be

   A. not Null

   B. Null

   C. both Null & not Null.

   D. any value.

View Answer

A. not Null

2. The language used in application programs to request data from the DBMS is referred to as the

   A. DML

   B. DDL

   C. VDL

   D. SDL

View Answer

A. DML

3. A logical schema

   A. is the entire database.

   B. is a standard way of organizing information into accessible parts.

   C. describes how data is actually stored on disk.

   D. both (A) and (C)

View Answer

A. is the entire database.

4. Related fields in a database are grouped to form a

   A. data file.

   B. data record.

   C. menu

   D. bank

View Answer

B. data record.

5. The database environment has all of the following components except:

   A. users

   B. separate files.

   C. database

   D. database administrator.

View Answer

A. users

6. The language which has recently become the defacto standard for interfacing application programs with relational database system is

A. Oracle

B. SQL

C. DBase

D. 4GL

View Answer

B. SQL

7. In the architecture of a database system external level is the

A. physical level.

B. logical level.

C. conceptual level

D. view level.

View Answer

D. view level.

8. An entity set that does not have sufficient attributes to form a primary key is a

A. strong entity set.

B. weak entity set.

C. simple entity set.

D. primary entity set.

View Answer

B. weak entity set.

9. In a Hierarchical model records are organized as

A. Graph

B. List

C. Links

D. Tree

View Answer

D. Tree

10. In an E-R diagram attributes are represented by

A. rectangle

B. square

C. ellipse

D. triangle

View Answer

C. ellipse

Database Management System MCQs Set-1

1. DBMS Stand for

A. Data base marginal system

B. Directory Based Memory Standard

C. Data Base Management System

D. Dual Bus Mask Storage

View Answer

C. Data Base Management System

2. In the relational modes, cardinality is termed as:

A. Number of tuples.

B. Number of attributes.

C. Number of tables.

D. Number of constraints.

View Answer

A. Number of tuples.

3. Relational calculus is a

A. Procedural language.

B. Non- Procedural language.

C. Data definition language.

D. High level language.

View Answer

B. Non- Procedural language.

4. The view of total database content is

A. Conceptual view.

B. Internal view.

C. External view.

D. Physical View.

View Answer

A. Conceptual view.

5. Cartesian product in relational algebra is

A. a Unary operator.

B. a Binary operator.

C. a Ternary operator.

D. not defined.

View Answer

B. a Binary operator.

6. DML is provided for

A. Description of logical structure of database.

B. Addition of new structures in the database system.

C. Manipulation & processing of database.

D. Definition of physical structure of database system.

View Answer

C. Manipulation & processing of database.

7. 'AS' clause is used in SQL for

A. Selection operation.

B. Rename operation.

C. Join operation.

D. Projection operation.

View Answer

B. Rename operation.

8. Architecture of the database can be viewed as

A. two levels.

B. four levels.

C. three levels.

D. one level.

View Answer

C. three levels.

9. In a relational model, relations are termed as

A. Tuples

B. Attributes

C. Tables

D. Rows

View Answer

C. Tables

10. The database schema is written in

A. HLL

B. DML

C. DDL

D. DCL

View Answer

C. DDL

Database Management System MCQ Set-14

Hello Friends,this particular section is well focused on the Frequently asked Database Fundamentals MCQs in the various competitive exam.The set of questions are very basic and easily understandable by reader.we have kept the question hardness level to very basic.

1. which of the following is record based logical model?

A. Network Model

B. Object oriented model

C. E-R Model

D. None of these

View Answer

A. Network Model

2. A data dictionary is a special file that contains:

A. The name of all fields in all files.

B. The width of all fields in all files.

C. The data type of all fields in all files.

D. All of the above.

View Answer

D. All of the above.

3. A file manipulation command that extracts some of the records from a file is called

A. SELECT

B. PROJECT

C. JOIN

D. PRODUCT

View Answer

A. SELECT

4. The physical location of a record is determined by a mathematical formula that trAnsforms a file key into a record location is :

A. B-Tree File

B. Hashed File

C. Indexed File

D. Sequential file.

View Answer

B. Hashed File

5. A primary key is combined with a foreign key creates

A. Parent-Child relation ship between the tables that connect them.

B. Many to many relationship between the tables that connect them.

C. Network model between the tables that connect them.

D. None of the above.

View Answer

A. Parent-Child relation ship between the tables that connect them.

6. In E-R Diagram derived attribute are represented by

A. Ellipse

B. Dashed ellipse

C. Rectangle

D. Triangle

View Answer

B. Dashed ellipse

7. Cross Product is a:

A. Unary Operator

B. Ternary Operator

C. Binary Operator

D. Not an operator

View Answer

C. Binary Operator

8. An instance of relational schema R (A, B, C) has distinct values of A including NULL values. Which one of the following is true?

A. A is a candidate key

B. A is not a candidate key

C. A is a primary Key

D. Both (A) and (C)

View Answer

B. A is not a candidate key

9. Consider the join of a relation R with relation S. If R has m tuples and S has n tuples, then the maximum size of join is ?

A. MN

B. M+N

C. (M+N)/2

D. 2(M+N)

View Answer

A. MN

1. Which of the following in not a function of DBA?

- (A) Network Maintenance
- (B) Routine Maintenance
- (C) Schema Definition
- (D) Authorization for data access

2. Which of the following is not Modification of the Database?

- (A) Deletion
- (B) Insertion
- (C) Sorting
- (D) Updating

3. 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>

4. Which of the following in true regarding Referential Integrity?

- (A) Every primary-key value must match a primary-key value in an associated table
- (B) Every primary-key value must match a foreign-key value in an associated table
- (C) Every foreign-key value must match a primary-key value in an associated table
- (D) Every foreign-key value must match a foreign-key value in an associated table

5. Which of the following is based on Multi Valued Dependency?

- (A) First
- (B) Second
- (C) Third
- (D) Fourth

6. A form can be used to

- (A) Modify records
- (B) Delete records
- (C) Format printed output
- (D) All of the above

7. The physical location of a record is determined by a mathematical formula that transforms a file key into a record location in

- (A) A tree file
- (B) An indexed file
- (C) A hashed file
- (D) A sequential file

8. In order to use a DBMS, it is important to understand

- (A) The physical schema
- (B) All sub-schemas that the system supports
- (C) One subschema
- (D) Both (a) and (b)

9. An operation that will increase the length of a list is

- (A) Insert
- (B) Look-up
- (C) Modify
- (D) None of the above

10. There are certain packages that allow people to define data items, place these items in particular records, combine the records into designated files and then manipulate and retrieve the stored data. What are they called?

- (A) Data storage system
- (B) Database management system (DBMS)
- (C) Batch processing system
- (D) Data communication package

11. To have a file hold a list, it is necessary to

- (A) Identify the records in the list
- (B) Identify the name, width and type of the fields of each record
- (C) Decide which fields will be used as sort or index keys
- (D) All of the above

12. In SQL, which command(s) is(are) used to redefine an index's future storage allocation

- (A) ALTER INDEX
- (B) REDEFINE INDEX
- (C) MODIFY INDEX
- (D) DO INDEX

13. _____ refers to the correctness and completeness of the data in a database?

- (A) Data security
- (B) Data integrity
- (C) Data constraint
- (D) Data independence

14. The main idea behind computer files is that it is convenient to

- (A) Arrange them
- (B) Store information together
- (C) Create them
- (D) Access them

15. One data dictionary software package is called

- (A) DB/DC dictionary
- (B) TOTAL
- (C) ACCESS
- (D) Any of the above

1. What name is given to the collection of facts, items of information or data which are related in some way?

- (A) Database
- (B) Directory information
- (C) Information tree
- (D) Information provider

2. A database management system

- (A) Allows simultaneous access to multiple files
- (B) Can do more than a record management system
- (C) Is a collection of programs for managing data in a single file
- (D) None of the above

3. In SQL, which command(s) is(are) used to enable/disable all triggers on a table?

- (A) ALTER TRIGGERS
- (B) ALTER TABLE
- (C) MODIFY TRIGGERS IN TABLE
- (D) All of the above

4. A report form

- (A) Appears on the computer monitor during data entry
- (B) Is used during report generation to format data
- (C) Both (a) and (b)
- (D) None of the above

5. The activity of a file

- (A) Is a low percentages of number of records added or deleted from a file
- (B) If high, reduces processing efficiency for sequential and non-sequential files
- (C) Is a measure of the percentage of existing records updated during a run
- (D) Refers to how closely the files fits into the allocated

6. When you have finished entering information into a form

- (A) The template is written to the data file
- (B) The contents of the form are written to the data file
- (C) The contents of the form can be printed
- (D) None of the above

7. Primitive operations common to all record management systems include

- (A) Print
- (B) Sort
- (C) Look-up
- (D) None of the above

8. The on-line, softcopy display a customer's charge account to respond to an inquiry is an examples of a

- (A) Forecasting report
- (B) Exception report
- (C) Regularly scheduled report
- (D) On demand report

9. Which of the following contains a complete record of all activity that affected the contents of a database during a certain period of time?

- (A) Report writer
- (B) Query language
- (C) Data manipulation language
- (D) Transaction log

10. The modify operation is likely to be done after

- (A) Delete
- (B) Look-up
- (C) Insert
- (D) All of the above

11. In SQL, which command is used to changes data in a table?

- (A) UPDATE
- (B) INSERT
- (C) BROWSE
- (D) APPEND

12. Which of the following is a serious problem of file management systems?

- (A) Difficult to update
- (B) Lack of data independence
- (C) Data redundancy
- (D) All of the above

13. Which of the following is not true of the traditional approach to information processing?

- (A) There is common sharing of data among the various applications
- (B) It is file-oriented
- (C) Programs are dependent on the files
- (D) It is inflexible

14. An indexing operation

- (A) Sorts a file using a single key
- (B) Sorts file using two keys
- (C) Establishes an index for a file
- (D) Both (b) and (c)

15. Which command is used to remove a table from the database in SQL?

- (A) DELETE TABLE
- (B) DROP TABLE
- (C) ERASE TABLE
- (D) UNATTACH TABLE

1. Which of the following is not characteristic of a relational database model?

- (A) Tables
- (B) Treelike structure
- (C) Complex logical relationships
- (D) Records

2. 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

3. 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

4. Which of the following represents a relationship among a set of values?

- (A) A Row
- (B) A Table
- (C) A Field
- (D) A Column

5. Minimal Superkeys are called

- (A) Schema keys
- (B) Candidate keys
- (C) Domain keys
- (D) Attribute keys

6. Logical design of database is called

- (A) Database Instance
- (B) Database Snapshot
- (C) Database Schema
- (D) All of the above

7. Which of the following is correct regarding Aggregate functions?

- (A) It takes a list of values and returns a single values as result
- (B) It takes a list of values and returns 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

8. What are ACID properties of Transactions?

- (A) Atomicity, Consistency, Isolation, Database
- (B) Atomicity, Consistency, Isolation, Durability
- (C) Atomicity, Consistency, Inconsistent, Durability
- (D) Automatically, Concurrency, Isolation, Durability

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

- (A) Stack
- (B) Data Structure
- (C) Linked list
- (D) Query

10. 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

11. A relation that has no partial dependencies is in which normal form

- (A) First
- (B) Second
- (C) Third
- (D) BCNF

12. A lock that allows concurrent transactions to access different rows of the same table is known as a

- (A) Field-level lock
- (B) Row-level lock
- (C) Table-level lock
- (D) Database-level lock

13. In SQL, which command(s) is(are) used to change a table's storage characteristics?

- (A) ALTER TABLE
- (B) MODIFY TABLE
- (C) CHANGE TABLE
- (D) All of the above

14. The way a particular application views the data from the data base that the application uses is a:

- (A) Module
- (B) Relational model
- (C) Schema
- (D) Subschema

15. Database management systems are intended to:

- (A) Eliminate data redundancy
- (B) Establish relationships among records in different files
- (C) Manage file access
- (D) All of the above

1. Data integrity control

- (A) Is used to set upper and lower limits on numeric data
- (B) Requires the use of passwords to prohibit unauthorized access to the file
- (C) Has the data dictionary keep the date and time of last access last back-up, and most recent modification for all files
- (D) None of the above

2. Embedded pointer provide

- (A) A secondary access path
- (B) A physical record key
- (C) An inverted index
- (D) All of the above

3. The files stored on a secondary stage device are composed of a hierarchy of data. What does a record in a file contain?

- (A) Bits
- (B) Characters
- (C) Data field
- (D) Schema

4. A computer file contains several records. What does each record contain?

- (A) Bytes
- (B) Words
- (C) Fields
- (D) Database

5. In order to use a record management system

- (A) You need to understand the low-level details of how information in stored
- (B) You need to understand the model the record management system uses
- (C) Both (a) and (b)
- (D) None of the above

6. In SQL, which command(s) is(are) used to issue multiple CREATE TABLE, CREATE VIEW, and GRANT statements in a single transaction?

- (A) CREATE PACKAGE
- (B) CREATE SCHEMA
- (C) CREATE CLUSTER
- (D) None of the above

7. A _____ Contains fields of data about one entity.

- (A) Record
- (B) File
- (C) Fields
- (D) Document

8. In SQL, the ALTER TABLESPACE command is used

- (A) To add/rename data files
- (B) To change storage characteristics
- (C) To take a table space online/offline
- (D) All of the above

9. In SQL, which command(s) is(are) used to recompile a stored function?

- (A) SET FUNCTION
- (B) SET STORED FUNCTION
- (C) ALTER FUNCTION
- (D) All of the above

10. Which of the following is not a relational database?

- (A) dBASE IV
- (B) 4th Dimension
- (C) FoxPro
- (D) Reflex

11. Which of the following is a database administrator's function?

- (A) Database design
- (B) Backing up the database
- (C) Performance monitoring
- (D) All of the above

12. Which command(s) is(are) used to enable/disable/drop an integrity constraint in SQL?

- (A) DEFINE TABLE
- (B) MODIFY TABLE
- (C) ALTER TABLE
- (D) All of the above

13. The PROJECT command will create new table that has

- (A) More fields than the original table
- (B) More rows than the original table
- (C) Both (a) and (b)
- (D) None of the above

14. A logical schema

- (A) Is the entire database
- (B) Is a standard way of organizing information into accessible parts
- (C) Describes how data is actually stored on disk
- (D) None of the above

15. A compound key

- (A) Is made up a several pieces of information
- (B) Uniquely identifies an item in a list
- (C) Both (a) and (b)
- (D) Is a combination of each unique key

1. In SQL, which command is used to add new rows to a table?

- (A) ALTER TABLE
- (B) ADD ROW
- (C) INSERT
- (D) APPEND

2. Which command is used to remove an index from the database in SQL?

- (A) DELETE INDEX
- (B) DROP INDEX
- (C) REMOVE INDEX
- (D) ROLL BACK INDEX

3. A _____ means that one record in a particular record type can be related to many records in another record type and vice-versa.

- (A) One-to-one relationship
- (B) One-to-many relationship
- (C) Many-to-one relationship
- (D) Many-to-many relationship

4. What is the name given to the database management system which is able to handle full text data, image data, audio and video?

- (A) Full media
- (B) Graphics media
- (C) Multimedia
- (D) Hypertext

5. In SQL, which command is used to make permanent changes made by statements issue since the beginning of a transaction?

- (A) ZIP
- (B) PACK
- (C) COMMIT
- (D) SAVE

6. In the DBM approach, application programs perform the

- (A) Storage function
- (B) Processing functions
- (C) Access control
- (D) None of the above

7. The _____ command is used to allocates an extent for the table in SQL

- (A) MODIFY ALLOCATES
- (B) MODIFY TABLE
- (C) ALTER TABLE
- (D) REDEFINE TABLE

8. The designer of a form includes

- (A) Filed designators
- (B) Prompts
- (C) Data
- (D) Both (a) and (b)

9. An-owner-member set in the CODASYL specifications may have

- (A) Only one owner but many owner occurrences
- (B) Only one member but many member occurrence
- (C) More than one member but only one occurrence per member
- (D) All of the above

10. In SQL, which command is used to create a database user?

- (A) ADD USER TO DATABASE
- (B) MK USER
- (C) CREATE USER
- (D) All of the above

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

- (A) Physical Level
- (B) Critical Level
- (C) Logical Level
- (D) View Level

12. Which of the following is Database Language?

- (A) Data Definition Language
- (B) Data Manipulation Language
- (C) Query Language
- (D) All of the above

13. In mathematical term Table is referred as

- (A) Relation
- (B) Attribute
- (C) Tuple
- (D) Domain

14. Which of the following in not Outer join?

- (A) Left outer join
- (B) Right outer join
- (C) Full outer join
- (D) All of the above

15. Which of the following is not binary operation?

- (A) Union
- (B) Project
- (C) Set Difference
- (D) Cartesian Product

1. In an Entity-Relationship Diagram “Diamonds” represents

- (A) Attributes
- (B) Multi-valued attributes
- (C) Weak entity set
- (D) Relationship sets

2. Which algebra is widely used in DBMS?

- (A) Relational algebra
- (B) Arithmetic algebra
- (C) Both
- (D) None

3. How many types of keys in Database Design?

- (A) Candidate key
- (B) Primary key
- (C) Foreign key
- (D) All of these

4. _____ is a classical approach to database design?

- (A) Left – Right approach
- (B) Right – Left approach
- (C) Top – Down approach
- (D) Bottom – Up approach

5. A database management system might consist of application programs and a software package called

- (A) FORTRAN
- (B) AUTOFLOW
- (C) BPL
- (D) TOTAL

6. When using a database management system, the first thing that you must do is to

- (A) Create a database file
- (B) Activate file editor
- (C) Load the software into your micro-computer
- (D) Keep a floppy disk in readiness

7. If a calculation is embedded in a form

- (A) The result of the calculations are stored with the form
- (B) The calculations are stored with the form
- (C) The result of the calculations are printed in report
- (D) All of the above

8. A multiple-form file management system

- (A) Lets you define different forms for different operations
- (B) Lets you create a look-up form with an associated read-only password to prevent access by unauthorized users
- (C) Both (a) and (b)
- (D) Allow you to entry data in all the forms

9. The logical data structure with a one-to-many relationship is a:

- (A) Network
- (B) Tree
- (C) Chain
- (D) Relational

10. Administrate supervision of database activities is the responsibility of the

- (A) Database administrator
- (B) DP Manager
- (C) DB Manager
- (D) DP administration

11. A scheme describes

- (A) Data elements
- (B) Records and files
- (C) Record relationships
- (D) All of the above

12. Data security threats include

- (A) Hardware failure
- (B) Privacy invasion
- (C) Fraudulent manipulation of data
- (D) All of the above

13. What is the abbreviation used for a software package that permits the users to create, retrieve and maintain records in a database?

- (A) DASD
- (B) FMS
- (C) EMMS
- (D) DBMS

14. The database administration function includes

- (A) Application programming
- (B) Computer operations management
- (C) Database access planning
- (D) All of the above

15. In SQL, which command is used to add a column/integrity constraint to a table

- (A) ADD COLUMN
- (B) INSERT COLUMN
- (C) MODIFY TABLE
- (D) ALTER TABLE

1. Which language has recently become the de-facto standard for interfacing application programs with relational database system?

- (A) Oracle
- (B) SQL
- (C) 4GL
- (D) None of the above

2. A computer file can be best described as

- (A) A single data item
- (B) A general collection of data items
- (C) An orderly collection of data items
- (D) A random collection of data items

3. The data dictionary tells the DBMS

- (A) What files are in the database
- (B) What attribute are possessed by the data
- (C) What these files contain
- (D) All of the above

4. A form defines

- (A) Where data is placed on the screen
- (B) The width of each field
- (C) Both (a) and (b)
- (D) None of the above

5. Which command is used to select distinct subject (SUB) from the table (BOOK)?

- (A) SELECT ALL FROM BOOK
- (B) SELECT DISTINCT SUB FROM BOOK
- (C) SELECT SUB FROM BOOK
- (D) None of the above

6. One approach to standardizing storing of data

- (A) MIS
- (B) Structured programming
- (C) CODASYL specifications
- (D) All of the above

7. Queries to a database

- (A) Are written in English
- (B) Can use aggregate functions like SUM and COUNT
- (C) Both (a) and (b)
- (D) None of the above

8. Internal auditors should review data system design before they are

- (A) Developed
- (B) Implemented
- (C) Modified
- (D) All of the above

9. The language used in application programs to request data from the DBMS is referred to as the

- (A) DML
- (B) DDL
- (C) Query language
- (D) All of the above

10. Which of the following is not the responsibility of the utilities component of DBMS software?

- (A) Creating the physical and logical designs
- (B) Removing flagged records for deletion
- (C) Creating and maintaining the data dictionary
- (D) Monitoring performance

11. It is more accurate to define a _____ as a variety of different record types that are treated as a single unit

- (A) Database
- (B) Table
- (C) Record
- (D) Flat File

12. 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

13. Column header is refer as

- (A) Table
- (B) Relation
- (C) Attributes
- (D) Domain

14. Which of the following is Relation algebra Operation?

- (A) Select
- (B) Union
- (C) Rename
- (D) All of the above

15. Which of the following is not an Aggregate function?

- (A) Min
- (B) Max
- (C) Select
- (D) Avg

1. Data Manipulation Language (DML) is not to

- (A) Create information table in the Database
- (B) Insertion of new information into the Database
- (C) Deletion of information in the Database
- (D) Modification of information in the Database

---

2. In precedence of set operators the expression is evaluated from:

- (A) Left to Left
- (B) Left to Right
- (C) Right to Right
- (D) Right to Left

---

3. The minimal set of super key is called

- (A) Primary key
- (B) Secondary key
- (C) Candidate key
- (D) Foreign key

---

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

---

5. A data dictionary doesn't provide information about:

- (A) Where data is located
- (B) The size of the disk storage device
- (C) It allows a many-to-many relationship
- (D) It is conceptually simple

---

6. In any hierarchy of data organization, the smallest entity to be processed as a single unit is called

- (A) Data field
- (B) Data record
- (C) Data file
- (D) Database

---

7. A report generator is used to

- (A) Update files
- (B) Print files on paper
- (C) Data entry
- (D) None of the above

---

8. Related fields in a data base are grouped to form

- (A) Data file
- (B) Data record
- (C) Menu
- (D) Bank

---

9. A large computer information system maintains many different computer files. Which amongst them is called a perpetual file?

- (A) Specialized file
- (B) Log file
- (C) Master file
- (D) Update file

---

10. In SQL, which command is used to remove a stored function from the database?

- (A) REMOVE FUNCTION
- (B) DELETE FUNCTION
- (C) DROP FUNCTION
- (D) ERASE FUNCTION

11. Versatile report generators can provide

- (A) Columnar totals
- (B) Subtotals
- (C) Calculations
- (D) All of the above

12. In SQL, which command is used to select only one copy of each set of duplicable rows

- (A) SELECT DISTINCT
- (B) SELECT UNIQUE
- (C) SELECT DIFFERENT
- (D) All of the above

13. The distinguishable parts of a record are called

- (A) Files
- (B) Data
- (C) Fields
- (D) Database

14. The model for a _____ resembles the hierarchical model in many respects.

- (A) Network database
- (B) Relational database
- (C) Distributed database
- (D) Hierarchical database

15. In SQL, which command(s) is(are) used to enable/disable a database trigger?

- (A) ALTER TRIGGER
- (B) ALTER DATABASE
- (C) ALTER TABLE
- (D) MODIFY TRIGGER

1. A good query system

- (A) Can accept English language commands
- (B) Allows non-programmers to access information stored in a database
- (C) Can be accessed only by data processing professionals
- (D) Both (a) and (b)

2. Each of data files has a _____ that describe the way the data is stored in the file.

- (A) File structure
- (B) Records
- (C) Fields
- (D) Database

3. A _____ contains the smallest unit of meaningful data, so you might call it the basic building block for a data file.

- (A) File structure
- (B) Records
- (C) Fields
- (D) Database

4. In a relational schema, each tuple is divided into fields called

- (A) Relations
- (B) Domains
- (C) Queries
- (D) All of the above

5. A file produced by a spreadsheet

- (A) Is generally stored on disk in an ASCII text format
- (B) Can be used as it by the DBMS
- (C) Can be used for graphic
- (D) All of the above

6. A command that lets you change one or more fields in a record is

- (A) Insert
- (B) Modify
- (C) Look-up
- (D) All of the above

7. The master list of an indexed file

- (A) Is sorted in ascending order
- (B) Contains only a list of keys and record numbers
- (C) Has a number assigned to each record
- (D) Both (b) and (c)

8. The data-base environment has all of the following components except:

- (A) Users
- (B) Separate files
- (C) Data base
- (D) Data-base administrator

9. Which of the following is true of a network structure?

- (A) It is a physical representation of the data
- (B) It allows a many-to-many relationship
- (C) It is conceptually simple
- (D) It will be the dominant data base of the future

10. In an Entity-Relationship Diagram Rectangles represents

- (A) Entity sets
- (B) Attributes
- (C) Database
- (D) Tables

11. 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

12. Set of permitted values of each attribute is called

- (A) Domain
- (B) Tuple
- (C) Relation
- (D) Schema

13. The attribute that can be divided into other attributes is called

- (A) Simple Attribute
- (B) Composite Attribute
- (C) Multi-valued Attribute
- (D) Derived Attribute

14. Database locking concept is used to solve the problem of

- (A) Lost Update
- (B) Uncommitted Dependency
- (C) Inconsistent Data
- (D) All of the above

15. In DBMS FD stands for _____

- (A) Facilitate data
- (B) Functional data
- (C) Facilitate dependency
- (D) Functional dependency

1. Which of the following hardware components is the most important to the operation of a database management system?

- (A) High-resolution video display
- (B) Printer
- (C) High speed, large-capacity disk
- (D) Plotter

---

2. In SQL, GRANT command is used to

- (A) Allow user to access databases
- (B) Allow user to create databases
- (C) Grant system privileges, roles, and object privileges to uses and roles
- (D) Choose auditing for specific SQL commands

---

3. In SQL, which command is used to select data in rows and column from one or more tables?

- (A) CHOOSE
- (B) SELECT
- (C) LIST
- (D) BROWSE

---

4. After you _____ a record, many data management the environments require you to issue a command to save the changes you made.

- (A) Delete
- (B) Update
- (C) Sort key
- (D) Index

---

5. Which command(s) is(are) used to redefine a column of the table in SQL?

- (A) ALTER TABLE
- (B) DEFINE TABLE
- (C) MODIFY TABLE
- (D) None of the above

6. Batch processing is appropriate if

- (A) A large computer system is available
- (B) Only a small computer system is available
- (C) Only a few transactions are involved
- (D) None of the above

---

7. Characteristic(s) of a distributed MIS structure is

- (A) Interactive sharing of the workload
- (B) A multiprocessing environment
- (C) Computers supporting local DP operations
- (D) All of the above

---

8. A file that is organized in uniform format is formally referred to as a _____ or a database file.

- (A) Document
- (B) Database
- (C) Record
- (D) Structured data file

---

9. A set of programs that handle a firm's data base responsibilities is called a

- (A) Data Base Management System (DBMS)
- (B) Data Base Processing System (DBPS)
- (C) Data Management System (DMS)
- (D) All of the above

---

10. A top-to-bottom relationship among the items in a database is established by a

- (A) Hierarchical schema
- (B) Network schema
- (C) Relational schema
- (D) None of the above

11. A condition that led to the development of databases was

- (A) A demand for more data to support information needs
- (B) An increase in the amount of data handled by organizations
- (C) The proliferation of data files
- (D) All of the above

12. In SQL, the CREATE TABLESPACE is used

- (A) To create a place in the database for storage of scheme objects, rollback segments, and naming the data files to comprise the table-space
- (B) To create a database trigger
- (C) To add/rename data files, to change storage
- (D) All of the above

13. In SQL, the CREATE TABLE is used

- (A) To create a table, defining its columns, integrity constrains, and storage allocation
- (B) To add a column/integrity constraint to a table
- (C) To redefine a column
- (D) To change a table's storage characteristics

14. The model for a record management system might be

- (A) Handwritten list
- (B) A Rolodex card file
- (C) A business form
- (D) All of the above

15. In SQL, the _____ command is used to recompile a view

- (A) COMPILE VIEW
- (B) DEFINE VIEW
- (C) CREATE VIEW
- (D) ALTER VIEW

1. The term _____ is sometimes used to refer to a data file in which all the records have the same record format, that is, the same field names, field lengths, and data types.

- (A) Database
- (B) Table
- (C) Flat file
- (D) Data structure

---

2. With respect to data input, the most accurate description of batch control is

- (A) Dividing documents to be entered into batches
- (B) Controlling the input of each input clerk
- (C) Comparing to a pre-calculated figure the total of a data item summed across a batch records put into the system
- (D) None of the above

---

3. A data dictionary is a special file that contains

- (A) The names of all fields in all files
- (B) The data types of all fields in all files
- (C) The widths of all fields in all files
- (D) All of the above

---

4. Which of the following is not a Storage Manager Component?

- (A) Transaction Manager
- (B) Logical Manager
- (C) Buffer Manager
- (D) File Manager

5. Which of the following is not a Schema?

- (A) Database Schema
- (B) Physical Schema
- (C) Critical Schema
- (D) Logical Schema

6. Who proposed the relational model?

- (A) Bill Gates
- (B) E.F. Codd
- (C) Herman Hollerith
- (D) Charles Babbage

7. In an Entity-Relationship Diagram “Ellipses” represents

- (A) Attributes
- (B) Weak entity set
- (C) Relationship sets
- (D) Multi-valued Attributes

8. Which of the following is an unary operation?

- (A) Selection operation
- (B) Generalized selection
- (C) Primitive operation
- (D) Projection operation

9. A table that displays data redundancies yields _____ anomalies

- (A) Insertion
- (B) Deletion
- (C) Update
- (D) All of the above

10. In SQL, the command(s) is(are) used to create an index for a table or cluster

- (A) CREATE INDEX
- (B) MODIFY INDEX
- (C) SET INDEX TO FILE
- (D) All of the above

11. The index consists of

- (A) A list of keys
- (B) Pointers to the master list
- (C) Both (a) and (b)
- (D) None of the above

12. If a piece of data is stored in two places in the database, then

- (A) Storage space is wasted
- (B) Changing the data is one spot will cause data inconsistency
- (C) It can be more easily accessed
- (D) Both (a) and (b)

13. The Management Information system (MIS) structure with one main computer system is called a

- (A) Hierarchical MIS structure
- (B) Distributed MIS structure
- (C) Centralized MIS structure
- (D) Decentralized MIS structure

14. Data item characteristics that are important in data management include

- (A) Punctuation
- (B) Language
- (C) Spelling
- (D) Width

15. If you want to group the records in the abc database, you could use the Job code as the _____.

- (A) Delete
- (B) Update
- (C) Sort Key
- (D) Index

1. What software packages are commonly used for businesses that have to track extensive lists of clients and inventory?

- (A) Special purpose packages
- (B) Custom made programs
- (C) Single function application packages
- (D) Data management packages

---

2. A number of related records that are treated as a unit is called

- (A) File
- (B) Field
- (C) Data
- (D) Batch

---

3. A _____ database does not use pointers or physical links, but instead finds related records by examining the contents of fields.

- (A) Network
- (B) Hierarchical
- (C) Relational
- (D) Object-Oriented

---

4. Which two files are used during operation of the DBMS?

- (A) Query language and utilities
- (B) Data manipulation language and query language
- (C) Data dictionary and transaction log
- (D) Data dictionary and query language

---

5. In SQL, which command(s) is(are) used to create a synonym for a schema object?

- (A) CREATE SCHEMA
- (B) CREATE SYNONYM
- (C) CREATE SAME
- (D) None of the above

6. Periodically adding, changing and deleting file records is called file

- (A) Updating
- (B) Upgrading
- (C) Restructuring
- (D) Renewing

7. In a _____ a parent record type can be linked to one or more "child" record types, but a child record type can have only one parent.

- (A) Network database
- (B) Relational database
- (C) Distributed database
- (D) Hierarchical database

8. In mathematical term Row is referred as

- (A) Relation
- (B) Attribute
- (C) Tuple
- (D) Domain

9. Which of the following is not Unary operation?

- (A) Select
- (B) Project
- (C) Rename
- (D) Union

10. ODBC stands for _____

- (A) Offline database connection
- (B) Oriented database connection
- (C) Open database connection
- (D) None of above

11. A transaction completes its execution is said to be

- (A) Saved
- (B) Loaded
- (C) Rolled
- (D) Committed

12. A relational database management (RDBM) package manages data in more than one file at once. How does it organize these file? As

- (A) Tables
- (B) Relations
- (C) Tuple
- (D) Both (a) and (b)

13. In SQL, which of the following is not a data definition language commands?

- (A) RENAME
- (B) REVOKE
- (C) GRANT
- (D) UPDATE

14. A _____ DBMS distributes data processing tasks between the workstation and a network server.

- (A) Network
- (B) Relational
- (C) Client Server
- (D) Hierarchical

15. Long-range planning report produced in an MIS are primarily designed for

- (A) Top management
- (B) Middle management
- (C) Lower management
- (D) None of the above

1. If the record management system allows you to edit values before they are recorded on disk, you can

- (A) Correct spelling changes before they are recorded
- (B) Change the name of a field
- (C) Change the width of a field
- (D) All of the above

2. Two files may be joined into a third file if

- (A) They have a row in common
- (B) They have a field in common
- (C) They have no records with the same value in the common field
- (D) Both (b) and (c)

3. A list in alphabetical order

- (A) Is in descending order
- (B) Is in ascending order
- (C) Is the result of a sort operation
- (D) Both (b) and (c)

4. A race condition occurs when

- (A) Two concurrent activities interact to cause a processing error
- (B) Two users of the DBMS are interacting with different files at the same time
- (C) Both (a) and (b)
- (D) None of the above

5. Which of the following command(s) is(are) used to recompile a stored procedure in SQL?

- (A) COMPILE PROCEDURE
- (B) ALTER PROCEDURE
- (C) MODIFY PROCEDURE
- (D) None of the above

6. Data items grouped together for storage purposes are called a

- (A) Record
- (B) Title
- (C) List
- (D) String

7. _____ allow us to identify uniquely a tuple in the relation.

- (A) Superkey
- (B) Domain
- (C) Attribute
- (D) Schema

8. If every non-key attribute is functionally dependent on the primary key, the relation will be in

- (A) First Normal Form
- (B) Second Normal Form
- (C) Third Normal Form
- (D) Fourth Formal Form

9. 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

10. A _____ means that one record in a particular record type is related to only one record of another record type.

- (A) One-to-one relationship
- (B) One-to-many relationship
- (C) Many-to-one relationship
- (D) Many-to-many relationship

11. If you want to organize a file in multiple ways, it is better to _____ the data rather than to sort it.

- (A) Delete
- (B) Update
- (C) Sort Key
- (D) Index

12. Goals for the design of the logical schema include

- (A) Avoiding data inconsistency
- (B) Being able to construct queries easily
- (C) Being able to access data efficiently
- (D) All of the above

13. If you want your database to include methods, you should use a _____ database.

- (A) Network
- (B) Distributed
- (C) Hierarchical
- (D) Object-Oriented

14. In SQL, the CREATE VIEW command is used

- (A) To recompile view
- (B) To define a view of one or more tables or views
- (C) To recompile a table
- (D) To create a trigger

15. Updating a database means

- (A) Revising the file structure
- (B) Reorganizing the database
- (C) Modifying or adding record occurrences
- (D) None of the above

1. The Primary key must be

- (A) Non Null
- (B) Unique
- (C) Option A or B
- (D) Option A and B

2. Which of the following is the structure of the Database?

- (A) Table
- (B) Schema
- (C) Relation
- (D) None of these

3. In SQL, which of the following is not a data Manipulation Language Commands?

- (A) DELETE
- (B) SELECT
- (C) UPDATE
- (D) CREATE

4. A list consists of last names, first names, addresses, and pin codes if all people in the list have the same last and the same pin code, a useful key would be

- (A) The pin code
- (B) The last name
- (C) A compound key consisting of the first name and the last name
- (D) All of the above

5. Subschema can be used to

- (A) Create very different, personalized views of the same data
- (B) Present information in different formats
- (C) Hide sensitive information by omitting fields from the sub-schema's description
- (D) All of the above

6. An audit trail

- (A) Is used to make back-up copies
- (B) Is the recorded history of operations performed on a file
- (C) Can be used to restore lost information
- (D) None of the above

7. Large collections of files are called

- (A) Fields
- (B) Records
- (C) Databases
- (D) File system

8. When performing a look-up operation using a form

- (A) You enter the search value into the form
- (B) You look at each form sequentially until you see the one you want
- (C) You type the key in an entry line, and the correct form is displayed
- (D) All of the above

9. A network schema

- (A) Restricts the structure to a one-to-many relationship
- (B) Permits many-to-many relation-ships
- (C) Stores data in tables
- (D) All of the above

10. A _____ means that one record in a particular record type may be related to more than one record of another record type.

- (A) One-to-one relationship
- (B) One-to-many relationship
- (C) Many-to-one relationship
- (D) Many-to many relationship

11. Data encryption techniques are particularly useful for

- (A) Reducing storage space requirements
- (B) Improving data integrity
- (C) Protecting data in data communication systems
- (D) All of the above

12. What is the language used by most of the DBMSs for helping their users to access data?

- (A) High level language
- (B) Query language
- (C) SQL
- (D) 4GL

---

1. Sophisticated report generators can

- (A) Print row-oriented reports
- (B) Perform arithmetic operations
- (C) Selectively retrieve and print portions of a list
- (D) All of the above

2. The relational model uses some unfamiliar terminology. A tuple is equivalent to a:

- (A) Record
- (B) Field
- (C) File
- (D) Data base

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

4. UML is stands for

- (A) Universal Modeling Language
- (B) Unified Modeling Language
- (C) United Modeling Language
- (D) Uni Modeling Language

5. Report generators are used to

- (A) Store data input by a user
- (B) Retrieve information from files
- (C) Answer queries
- (D) Both (b) and (c)

6. In a large DBMS

- (A) Each user can "see" only a small part of the entire database
- (B) Each user can access every sub-schema
- (C) Each subschema contains every field in the logical schema
- (D) All of the above

7. Information can be transferred between the DBMS and a

- (A) Spreadsheet program
- (B) Word processor program
- (C) Graphics program
- (D) All of the above

8. In SQL, which command(s) is(are) used to enable/disable a database trigger?

- (A) Modify User
- (B) Change User
- (C) Alter Trigger
- (D) None of the above

9. Which of the following is a type of DBMS software?

- (A) Database manipulation language
- (B) Query language
- (C) Utilities
- (D) Report writer

10. 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

11. A functional dependency between two or more non-key attributes is called

- (A) Transitive dependency
- (B) Partial transitive dependency
- (C) Functional dependency
- (D) Partial functional dependency

12. Sort/report generators

- (A) Are faster than index/report generators
- (B) Require more disk space than index/report generators
- (C) Do not need to sort before generating a report
- (D) Both (a) and (b)

13. Which of the following is not a logical data-base structure?

- (A) Tree
- (B) Relational
- (C) Network
- (D) Chain

14. Which of the following is not an advantage of the data-base approach?

- (A) Elimination of the data redundancy
- (B) Ability to associate related data
- (C) Increased security
- (D) All of the above are advantages

15. The highest level in the hierarchy of data organization is called

- (A) Data bank
- (B) Database
- (C) Data file
- (D) Data record

DBMS Questions

Latest DBMS MCQ Objective Questions

Question 1:

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A Database Management System (DBMS) is:

1. Collection of interrelated data
2. Collection of programs to access data
3. Collection of data describing one particular enterprise
4. All of the three
5. Unattempted

Answer (Detailed Solution Below)

Option 2 : Collection of programs to access data

DBMS Question 1 Detailed Solution

Concept :

- A database is a systematic collection of data. They support electronic storage and manipulation of data.
- Databases make data management easy.
- Database Management System (DBMS) is a **collection of programs which enables its users to access database, manipulate data, reporting and representation of data.** It also helps to control access to the database.
- Database Management Systems are not a new concept and as such, had been first implemented in the 1960s.

Advantages of Database Management System (DBMS)

1. Improved data sharing

- An advantage of the database management approach is, the DBMS helps to create an environment in which end users have better access to more and better-managed data.
- Such access makes it possible for end-users to respond quickly to changes in their environment.

2. Improved data security

- The more users access the data, the greater the risks of data security breaches. Corporations invest considerable amounts of time, effort, and money to ensure that corporate data are used properly.
- A DBMS provides a framework for better enforcement of data privacy and security policies.

3. Better data integration

- Wider access to well-managed data promotes an integrated view of the organization's operations and a clearer view of the big picture.
- It becomes much easier to see how actions in one segment of the company affect other segments.

4. Minimized data inconsistency

- Data inconsistency exists when different versions of the same data appear in different places.

- For example, data inconsistency exists when a company's sales department stores a sales representative's name as "Bill Brown" and the company's personnel department stores that same person's name as "William G. Brown," or when the company's regional sales office shows the price of a product as $45.95 and its national sales office shows the same product's price as $43.95.
- The probability of data inconsistency is greatly reduced in a properly designed database.

Question 2:

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In which of the following states the transaction executes all its operations successfully and all the effects are now permanently saved on the database system?

1. Active
2. Partially committed
3. Committed
4. Failed

Answer (Detailed Solution Below)

Option 3 : Committed

DBMS Question 2 Detailed Solution

The correct answer is **Committed**

- **Active state**: The active state is the first state of every transaction. In this state, the transaction is being executed.
- **Partially committed**: In the partially committed state, a transaction executes its final operation, but the data is still not saved to the database.
- **Committed**: A transaction is said to be in a committed state if it **executes all its operations successfully**. In this state, all the effects are now permanently saved on the database.

system.

- **Failed state**: If any of the checks made by the database recovery system fails, then the transaction is said to be in the **failed state**.
- **Aborted**: If any of the checks fail and the transaction has reached a failed state then the **database recovery system** will make sure that the database is in its previous consistent state. If not, then it will abort or roll back the transaction to bring the database into a consistent state.
- If the transaction fails in the middle of the transaction then before executing the transaction, all the executed transactions are rolled back to its consistent state. After aborting the transaction, the database recovery module will select one of the two operations:
  - **Re-start the transaction**
  - **Kill the transaction**

Question 3:

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Consider the following ORACLE relations:
R(A,B,C)={⟨1,2,3⟩,⟨1,2,0⟩,⟨1,3,1⟩,⟨6,2,3⟩,⟨1,4,2⟩,⟨3,1,4⟩ }
S(B,C,D)={⟨2,3,7⟩,⟨1,4,5⟩,⟨1,2,3⟩,⟨2,3,4⟩,⟨3,1,4⟩ }
Consider the following two SQL queries
SQ1:

```
SELECT R.B,AVG(S.B)
FROM R, S
WHERE R.A=S.C AND S.D<7
GROUP BY R.B;
```

SQ2:

```
SELECT DISTINCT S.B,MIN(S.C)
FROM S GROUP BY S.B
HAVING COUNT (DISTINCT S.D)>1;
```

If M is the number of tuples returned by SQ1 and N is the number of tuples returned by SQ2 then M=_____, N=_____.

1. 3,3
2. 4,2
3. 3,2

4. 4,4

Answer (Detailed Solution Below)

Option 2 : 4,2

DBMS Question 3 Detailed Solution

The correct answer is **option 2.**

Concept:

Order or SQL query evaluation:

1. From: Cartesian product of tables.
2. Where: Select the rows.
3. Group by: Divide the rows into groups.
4. Having: Select the groups.
5. Expressions: Expressions In select are evaluated.
6. Distinct: Distinct in select (Eliminate the duplicates).
7. Ser-Operations: (Union, intersect, Except)
8. Order By: Sort the rows.

The given data,

SQ1:

```
SELECT R.B,AVG(S.B)
FROM R, S
WHERE R.A=S.C AND S.D<7
GROUP BY R.B;
```

The relation R is,

A	B	C
3	1	4
3	1	4
1	2	3
1	2	0
1	3	1
1	4	2

The relation S is,

B	C	D
2	3	7
2	3	4
3	1	4
3	1	4
3	1	4

3	1	4

Output: Four tuples selected M=4.

R.B	Avg(S.B)
1	2
2	3
3	1.5
4	1.5

SQ2:

```
SELECT DISTINCT S.B,MIN(S.C)
FROM S GROUP BY S.B
HAVING COUNT (DISTINCT S.D)>1;
```

The relation S is,

B	C	D
1	2	3
1	4	5
2	3	4
2	3	7
3	1	4

Output: Only two tuples selected N=2.

B	Min(C)
1	2
2	3

Hence the correct answer is 4,2.

Question 4:

View this Question Online >

Which databases supports Polymorphism, Inheritance, Encapsulation, and Abstraction concepts?

1. RDBMS
2. Distributed DBMS
3. Network DBMS
4. OODBMS

Answer (Detailed Solution Below)

Option 4 : OODBMS

DBMS Question 4 Detailed Solution

The correct answer is **option 4.**

Object Oriented DBMS:

Object-oriented DBMS is based on the object-oriented programming paradigm's model. They are useful for expressing both consistent data saved in databases and transitory data encountered in running applications. They employ simple, reusable parts known as objects.

Explanation:

Object-oriented databases closely relate to object-oriented programming concepts. The four main ideas of object-oriented programming are:

- Polymorphism
- Inheritance
- Encapsulation
- Abstraction

These four attributes describe the critical characteristics of object-oriented management systems.

Hence the correct answer is OODBMS.

Additional Information

Network DBMS:

Network DBMS is one where the relationships among data in the database are of type many to many in the form of a network.

Relational DBMS:

In relational databases, the database is represented in the form of relations. Each relation models an entity and is represented as a table of values. In the relation or table, a row is called a tuple and denotes a single record.

Distributed DBMS:

A distributed database is a set of interconnected databases that are distributed over the computer network or internet.

Question 5:

View this Question Online >

Which of the following is component of object-oriented DBMS?

1. Object
2. Class
3. Attributes and Methods
4. All the above

Answer (Detailed Solution Below)

Option 4 : All the above

DBMS Question 5 Detailed Solution

The correct answer is **option 4.**

Concept:

Object Oriented DBMS:

Object-oriented DBMS is derived from the model of the object-oriented programming paradigm. Components of object-oriented data models are,

Object:

A real-world entity, such as a specific life task on a to-do list.

Attributes and Methods:

An object has a state as well as behaviors. An object has properties (also known as attributes) such as name, status, and create date. Its state is represented by the collection of its attributes. An object also has behaviors (also known as methods, actions, or functions) that change or operate on its properties.

Class:

The grouping of all objects with the same properties and behaviors forms a class.

Object-Oriented Design Patterns:

Object-oriented data modeling also implies certain principles like inheritance, polymorphism, overriding, and association.

Hence the correct answer is All the above.

Top DBMS MCQ Objective Questions

Question 6 View this Question Online >

Fifth-Generation languages are the ____.

1. Assembly languages
2. Machine languages
3. constraint based languages
4. High level language
5. None of the above

Answer (Detailed Solution Below)

Option 3 : constraint based languages

DBMS Question 6 Detailed Solution

The correct answer is **constraint-based languages.**

Key Points

Programming languages are classified in variety of ways and **generation** is one of them.

- Generation are further classified as: First-generation, second-generation, third-generation, fourth-generation, **fifth-generation**.
- Fifth generation language is applied to logic and **constraint-based languages** like Prolog.

Additional Information

- Assembly languages → Second-generation
- Machine languages → First-generation
- High Level language → Third-generation

Question 7 View this Question Online >

Consider the relation X(P, Q, R, S, T, U) with the following set of functional dependencies

F = {

{P, R} → {S, T},

{P, S, U} → {Q, R}

}

Which of the following is the trivial functional dependency in F^+, where F^+ is closure of F?

1. {P, R} → {S, T}
2. {P, R} → {R, T}
3. {P, S} → {S}
4. {P, S, U} → {Q}

Answer (Detailed Solution Below)

Option 3 : {P, S} → {S}

DBMS Question 7 Detailed Solution

Concept:

The closure of F, denoted as F^+, is the set of all regular FD, that can be derived from.

For trivial functional dependency,

Let A and be two sets consists of attributes of a relation

A → B

$A \supseteq B$

Explanation:

Option 1:

{P, R} → {S, T}

$\{P, R\} \not\supseteq \{S, T\}$

Not a trivial functional dependency

Option 2:

$\{P, R\} \rightarrow \{R, T\}$

$\{P, R\} \not\supseteq \{R, T\}$

Not a trivial functional dependency

Option 3:

$\{P, S\} \rightarrow \{S\}$

$\{P, S\} \supseteq \{S\}$

It is a trivial functional dependency

Option 4:

$\{P, S, U\} \rightarrow \{Q\}$

$\{P, S, U\} \not\supseteq \{Q\}$

Not a trivial functional dependency

NOTE:

$\supseteq$ → superset

$\not\supseteq$ → not superset

Question 8

View this Question Online >

Find minimum number of tables required for converting the following entity relationship diagram into relational database?

1. 2
2. 4
3. 3
4. 5

Answer (Detailed Solution Below)

Option 3 : 3

DBMS Question 8 Detailed Solution

Rules for finding a minimum number of tables required for an ER diagram:

1) A strong entity with single or composite attributes requires one table.

2) A strong entity with multivalued attributes requires two tables.

3) In the case of many to many relations between two entities, 3 tables are required.

Explanation:

There is one to many relationships between R_1 and R_2. So, two tables are required for two entities.

But, entity R_1 contains multivalued attribute B, due to which one table for this is also needed.

Here we have 1 to Many relation so we requires two tables.

Attribute B being multi-valued, we need to remove the multi-valued attribute B to convert the given entity-relationship diagram into a relational database.

As relational database do not allow multi-valued attributes. We have to introduce a new table.

So, the number of tables is as below:
R1
R12R2
A table for B (Multi-valued attribute)
So, a total of 3 tables are required for the given entity relational diagram.

So, option 3 is the correct answer.

Question 9 View this Question Online >

Which symbol denote derived attributes in ER Model?

1. Double ellipse
2. Dashed ellipse
3. Squared ellipse
4. Ellipse with attribute name underlined

Answer (Detailed Solution Below)

Option 2 : Dashed ellipse

DBMS Question 9 Detailed Solution

Concept:

An attribute that can be derived from other attributes of the entity type is known as a derived attribute, derived attribute is represented by a dashed eclipse.

Explanation:

In the ER model

in the ER model,

Option 1: Double ellipse

Multivalued attribute

Option 2: Dashed ellipse

Derived attribute

Option 4: Ellipse with attribute name underlined

Key attribute

Question 10 View this Question Online >

An ER model of a database consists of entity types A and B. These are connected by a relationship R which does not have its own attribute. Under which one of the following conditions, can the relational table for R be merged with that of A?

1. Relationship R is one-to-many and the participation of A in R is total.
2. Relationship is one-to-many and the participation of A in R is partial.
3. Relationship R is many-to-one and the participation of A in R is total.

4. Relationship R is many-to-one and the participation of A in R is partial.

Answer (Detailed Solution Below)

Option 3 : Relationship R is many-to-one and the participation of A in R is total.

Consider the relation scheme R = (E, F, G, H, I, J, K, L, M, N) and the set of functional dependencies {(E, F} → {G}, {F} → {I, J}, {E, H} → {K, L}, {K} → {M}, {L} → {N}} on R. What is the key for R ?

1. {E, F}
2. {E, F, H}
3. {E, F, H, K, L}
4. {E}

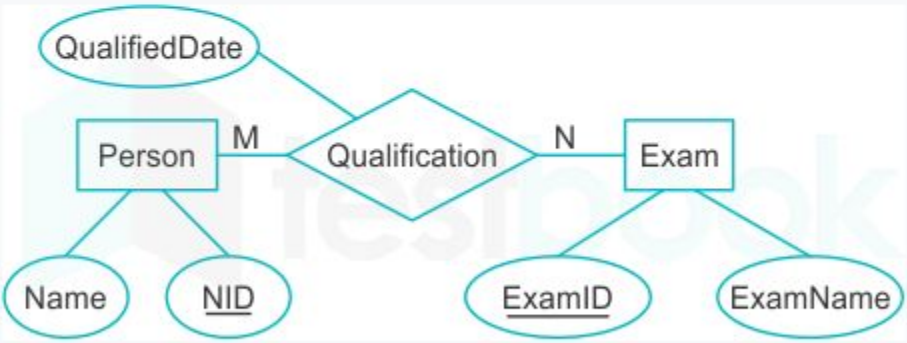
Answer (Detailed Solution Below)

Option 2 : {E, F, H}

Question 12

View this Question Online >

Consider the following Entity Relationship Diagram (ERD)



Which of the following possible relations will not hold if the above ERD is mapped into a relation model ?

1. Person (NID, Name)
2. Qualification (NID, ExamID, QualifiedDate)
3. Exam (ExamID, NID, ExamName)
4. Exam (ExamID, ExamName)

Answer (Detailed Solution Below)

Option 3 : Exam (ExamID, NID, ExamName)

Question 13 View this Question Online >

Consider the following statements S1 and S2 about the relational data model:

S1: A relation scheme can have at most one foreign key.

S2: A foreign key in a relation scheme R cannot be used to refer to tuples of R.

Which one of the following choices is correct?

1. S1 is true and S2 is false.
2. Both S1 and S2 are true.
3. Both S1 and S2 are false.
4. S1 is false and S2 is true.

Answer (Detailed Solution Below)

Option 3 : Both S1 and S2 are false

Option 3 : Both S1 and S2 are false.

Question 14

View this Question Online >

Which one of the following is used to represent the supporting many-one relationships of a weak entity set in an entity-relationship diagram?

1. Diamonds with double/bold border
2. Rectangles with double/bold border
3. Ovals with double/bold border
4. Ovals that contain underlined identifiers

Answer (Detailed Solution Below)

Option 1 : Diamonds with double/bold border

Question 15 View this Question Online >

Which of the following is **NOT** a superkey in a relational schema with attributes V, W, X, Y, Z and primary key V Y?

1. VXYZ
2. VWXZ
3. VWXY
4. VWXYZ

Answer (Detailed Solution Below)

Option 2 : VWXZ