

<https://meritnotes.com/computer-quiz/dbms-questions/2-6744/>

1.A collection of interrelated records is called a

- (A) Database
- (B) Spreadsheet
- (C) Management information system
- (D) Text file

2.The method of file organization in which data records in a file are arranged in a specified order according to key field is known as the

- (A) Sequential access method
- (B) Queuing method
- (C) Predetermined method
- (D) Direct access method

3.Unlike filters queries can be saved as in a database.

- (A) Database
- (B) Filters
- (C) Objects
- (D) Any of the above

4.External database is

- (A) Database created using DBMS package
- (B) Database created in MS-Word
- (C) Database created in EXCEL
- (D) All of the above

5.ROLLBACK in a database is _____ statement.

- (A) DDL
- (B) DML
- (C) DCL
- (D) TCL

Attributes can be defined for

- (A) Pages
- (B) Macro
- (C) Switch board
- (D) Entity

6.What refers to a set of characters of a particular design?

- (A) Calligraphy
- (B) Typeface
- (C) Stencil
- (D) Keyface

7.Computer manipulate data in many ways, and this manipulation is called

- (A) File handling
- (B) Compiling
- (C) Batching
- (D) Processing

8.A Field is a related group of _____

- (A) Characters
- (B) Cables
- (C) Files
- (D) Records

9.C was primarily developed as

- (A) System programming language
- (B) Data processing language
- (C) General purpose language
- (D) None of the above

10 A field that uniquely identifies which person, thing, or event the record describes is a _____

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

11 A data dictionary doesn't provide information about _____

- (A) the size of the disk storage disk
- (B) where data is located
- (C) how owns or is responsible for the data
- (D) who owns or is responsible for the data

12 Participants can see and hear each other in a/an _____

- (A) Message system
- (B) Bulletin board
- (C) Teleconference
- (D) Electronic mail system

13 Example of non-numeric data is _____

- (A) Bank balance
- (B) Examination score
- (C) Employee address
- (D) All of these

14 Error which is diagnosed by compiler is _____

- (A) Semantic error
- (B) Logical error
- (C) Syntax error
- (D) None of the above

15 The first step in the transaction processing cycle is _____

- (A) Audit
- (B) Database operations
- (C) User inquiry

16 A tuple is a _____

- (A) row of a table
- (B) key of a table
- (C) column of a table
- (D) two-dimensional table

17 The following are components of a database except _____

- (A) reports
- (B) indexes
- (C) metadata
- (D) user data

18 _____ is one reason for problems of data integrity.

- (A) Data redundancy
- (B) Security constraints
- (C) Data inconsistency
- (D) Data availability constraints

19 Forms that are used to organize business data into rows and columns are called _____

- (A) transaction sheets
- (B) business forms
- (C) registers
- (D) spreadsheets

20 ____ represents raw facts, whereas ____ is data made meaningful.

- (A) Data, information
- (B) Information, reporting
- (C) Information, bits
- (D) Records, bytes

21 Which of the following places the common data elements in order from smallest to largest?

- (A) Character, file record, field, database
- (B) Character, record, field, file, database
- (C) Bit, byte, character, record, field, file, database
- (D) Character, field, record, file, database

22 A collection of unprocessed items is ____

- (A) Reports
- (B) Memory
- (C) Data
- (D) Information

23 Which command we will give if we want to show the database objects with its description?

- (A) List
- (B) Show
- (C) Details
- (D) Any of these

24 The simultaneous execution of two or more

- (A) Disk mirroring
- (B) Multiprocessing
- (C) Reduced instruction set computing
- (D) Sequential access

25 1 k bits equal to the

- (A) 10 bits
- (B) 1000 bits
- (C) 1024 bits
- (D) 100 bits

26 A collection of conceptual tools for describing data, relationships, semantics and constraints is referred to as

- (A) DBMS
- (B) Data model
- (C) Database
- (D) ER model

27 ____ search method is conducted for a specific title, domain, URL, or host.

- (A) Logical
- (B) Keyword
- (C) Field
- (D) Boolean

28 A telephone number, a birth date, and a customer name are all examples of

- (A) A database

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

29 You organize files by storing them in

- (A) Archives
- (B) Indexes
- (C) Folders
- (D) Lists

30 The issues that deals with the collection and use of data about individuals is

- (A) Accuracy
- (B) Access
- (C) Privacy
- (D) Publicity

31 The database administrator is, in effect, the coordinator between them _____ and the _____

- (A) Database, users
- (B) Application program; database
- (C) DBMS; database
- (D) Application programs; users

32 In order to understand DBMS, it is important to understand?

- (A) The physical schema
- (B) One sub schema
- (C) All sub schema that are system support
- (D) Both (a) and (b)

33 Where will we find the referential integrity command?

- (A) Table
- (B) Tools
- (C) Format
- (D) None of these

34 The DBMS that is most difficult to use is _____

- (A) Oracle Corporation's Oracle
- (B) Microsoft's Access
- (C) Microsoft's SQL Server
- (D) None of these

1. A relational database consists of a collection of
a) Tables

- b) Fields
- c) Records
- d) Keys

View Answer

Answer: a

Explanation: Fields are the column of the relation or tables. Records are each row in a relation. Keys are the constraints in a relation.

2. A _____ in a table represents a relationship among a set of values.

- a) Column
- b) Key
- c) Row
- d) Entry

View Answer

Answer: c

Explanation: Column has only one set of values. Keys are constraints and row is one whole set of attributes. Entry is just a piece of data.

3. The term _____ is used to refer to a row.

- a) Attribute
- b) Tuple
- c) Field
- d) Instance

View Answer

4. The term attribute refers to a _____ of a table.

- a) Record
- b) Column
- c) Tuple
- d) Key

View Answer

Answer: b

Explanation: Attribute is a specific domain in the relation which has entries of all tuples.

5. For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute.

- a) Domain
- b) Relation
- c) Set
- d) Schema

View Answer

Answer: a

Explanation: The values of the attribute should be present in the domain. Domain is a set of values permitted.

6. Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time.

- a) Instance, Schema
- b) Relation, Schema
- c) Relation, Domain
- d) Schema, Instance

View Answer

Answer: d

Explanation: Instance is an instance of time and schema is a representation.

7. Course(course_id,sec_id,semester)

Here the course_id,sec_id and semester are _____ and course is a _____

- a) Relations, Attribute
- b) Attributes, Relation
- c) Tuple, Relation
- d) Tuple, Attributes

View Answer

Answer: b

Explanation: The relation course has a set of attributes course_id,sec_id,semester .

8. Department (dept name, building, budget) and Employee (employee_id, name, dept name, salary)

Here the dept_name attribute appears in both the relations. Here using common attributes in relation schema is one way of relating _____ relations.

- a) Attributes of common
- b) Tuple of common
- c) Tuple of distinct
- d) Attributes of distinct

View Answer

Answer: c

Explanation: Here the relations are connected by the common attributes.

9. A domain is atomic if elements of the domain are considered to be _____ units.

- a) Different
- b) Indivisible
- c) Constant
- d) Divisible

View Answer

Answer: b

Explanation: None.

10. The tuples of the relations can be of _____ order.

- a) Any
- b) Same
- c) Sorted
- d) Constant

View Answer

Answer: a

Explanation: The values only count. The order of the tuples does not matter.

1. Which of the following syntax of the basic query is correct?

- a) select <relation> from <attribute>
- b) select <attribute> from <relation>
- c) select <tuple> from <relation>
- d) select <tuple> from <attribute>

View Answer

Answer: b

Explanation: The select clause is used to select a specific attribute from a given relation.

So, the syntactically correct statement is select <attribute> from <relation>.

2. Which of the following keywords is used beside the select clause to explicitly specify that duplicates are not removed?

- a) all
- b) not unique
- c) notnull
- d) include

View Answer

Answer: a

Explanation: The “all” keyword is used beside the select clause to explicitly specify that duplicates are not removed.

3. Which of the following logical connectives is not included in SQL?

- a) and
- b) or
- c) nor
- d) not

View Answer

Answer: d

Explanation: “not” is not a logical connective included in the SQL. The and, or and nor are logical connectives that are included in SQL.

4. The where clause is a predicate involving attributes of the relation in the _____ clause.

- a) select
- b) from
- c) with
- d) none of the mentioned

View Answer

Answer: b

Explanation: The “from” clause contains the attribute names on which the “which” clause can be used on.

5. select distinct dept_name

from institute;

What does the above query do?

- a) It gives all the tuples having a distinct dept_name
- b) It gives the dept_name attribute values of all tuples without repetition
- c) It gives all the dept_name attribute of all the tuples
- d) It gives all the tuples having a null value under the dept_name attribute

View Answer

Answer: b

Explanation: The distinct keyword is used to explicitly force the elimination of duplicate tuples. Thus, the above query excludes duplicates.

6. What does the following query do?

```
select name, ID, branch
```

```
from student, department
```

```
where student.branch = department.branch;
```

- a) It gives all values of name, ID, branch from both the relations only if all those attributes are present in both
- b) It gives all values of name, ID, branch from their respective relations
- c) It gives the values of name, ID, branch from their respective relations where the values in the branch attribute are same
- d) It gives the values of name, ID, branch from their respective relations where all the values are matching with each other

View Answer

Answer: c

Explanation: student.branch = department.branch verifies whether both the values of the attributes are same in both the relations and returns the value.

7. The _____ clause is used to list the attributes desired in the result of a query

- a) select
- b) from
- c) where
- d) create

View Answer

Answer: a

Explanation: The select clause is used to list the attributes desired in the result of a query.

8. If we specify multiple relations in the from clause and do not specify any conditions in the where clause, what will the result be?

- a) The natural join of both the relations
- b) The left outer join of both the relations
- c) A syntactical error
- d) The Cartesian product of both the relations

View Answer

Answer: d

Explanation: If we specify multiple relations in the from clause and do not specify any conditions in the where clause, the default definition given by the from clause is the Cartesian product of the relations listed in the clause. So it returns all the possible combinations of the tuples of the two relations.

9. State true or false: Multiple conditions in the where clause are separated by a “,”

- a) True
- b) False

View Answer

Answer: b

Explanation: Multiple conditions in the where clause are separated by the “and” keyword.

10. What does the natural join operation do?

- a) It considers only those pairs of tuples that have the same value on those attributes that appear in the schemas of both relations
- b) It considers only those pairs of tuples that have the same value on at least one of the attributes that appear in the schemas of both the relations
- c) It considers only those pairs of tuples that do not have the same value on those attributes that appear in the schemas of both relations
- d) None of the mentioned

View Answer

Answer: a

Explanation: The natural join operation considers only those pairs of tuples that have the same value on those attributes that appear in the schemas of both the relations. The natural join operation operates on 2 relations and gives a relation as the result.

11. Observe the following query and choose the correct option.

```
select name, ID
```

```
from student natural join department natural join section
```

- a) The query is syntactically wrong because there is no where clause
- b) The query is syntactically wrong because there are more than one attributes in the select clause
- c) The query is syntactically wrong because more than one relations are included in the natural join

operation

d) The query is correct

View Answer

Answer: d

Explanation: The query is syntactically correct because, where clause is not necessary in a query, more than one attributes can be specified in the select clause and more than one relations may be operated on, using the natural join operator.

12. Which keyword is used to rename a relation in a query?

a) rename

b) as

c) is

d) to

View Answer

Answer: b

Explanation: The "as" keyword is used to rename a relation in a query. This is used for convenience as long relation names can reduce readability.

13. While operating with strings, what does "___%" match with?

a) A string of three letters

b) A string of at least three letters

c) A string of three words

d) A string of at least three words

View Answer

Answer: a

Explanation: The string in the question matches with a string having at least three letters. The first three blank spaces indicate three letters whereas the percentage indicates indefinite spaces after that.

1. Which of the following information does an SQL DDL not specify?

a) The schema for each relation

b) The integrity constraints

c) The operations on the tuples

d) The security and authorization information for each relation

View Answer

Answer: c

Explanation: The SQL DDL does not specify the operations that are supposed to be made on the tuples. DDL means Data definition language, hence it does not include the operations made.

2. Which of the following data types does the SQL standard not support?

a) char(n)

b) String(n)

c) varchar(n)

d) float(n)

View Answer

Answer: b

Explanation: The SQL standard does not support String(n) but it supports char, varchar and float.

3. Which command is used to create a new relation in SQL

a) create table(, ...)

b) create relation(, ...)

c) new table(, ...)

d) new relation(, ...)

View Answer

Answer: a

Explanation: We use the create table command to create a new relation in the database. The syntax is create table(, ...);

4. If a1, a2, a3 are attributes in a relation and S is another relation, which of the following is an incorrect specification of an integrity constraint?

a) primary key(a1, a2, a3)

b) primary key(a1)

c) foreign key(a1, a2) references S

d) foreign key(a1, a2)

View Answer

Answer: d

Explanation: Whenever the integrity constraint foreign key is mentioned, the attributes that are the foreign keys should always be referenced from the relation in which they are primary keys.

5. What is the syntax to load data into the database? (Consider D as the database and a, b, c as data)

a) enter into D (a, b, c);

b) insert into D values (a, b, c);

c) insert into D (a, b, c);

d) insert (a, b, c) values into D;

View Answer

Answer: b

Explanation: To load data into a database we use the insert into command. The syntax is insert into D values (a, b, c) where a, b, c are the appropriate values

6. Which of the following commands do we use to delete a relation (R) from a database?

a) drop table R

b) drop relation R

c) delete table R

d) delete from R

View Answer

Answer: a

Explanation: The drop table command is used to delete a relation from a database whereas the delete table removes all the tuples from a relation

7. Which of the following commands do we use to delete all the tuples from a relation (R)?

a) delete table R

b) drop table R

c) delete from R

d) drop from R

View Answer

Answer: c

Explanation: The delete from command is used to delete all the tuples in a relation. The drop table totally deletes a relation.

8. Choose the correct command to delete an attribute A from a relation R

a) alter table R delete A

b) alter table R drop A

c) alter table drop A from R

d) delete A from R

View Answer

Answer: b

Explanation: We can delete an attribute from a relation using the alter table command with the following syntax

alter table drop

9. create table apartment(ownerID varchar (5), ownername varchar(25), floor numeric(4,0), primary key (ownerID));

Choose the correct option regarding the above statement

- a) The statement is syntactically wrong
- b) It creates a relation with three attributes ownerID, ownername, floor in which floor cannot be null.
- c) It creates a relation with three attributes ownerID, ownername, floor in which ownerID cannot be null.
- d) It creates a relation with three attributes ownerID, ownername, floor in which ownername must consist of at least 25 characters.

View Answer

Answer: c

Explanation: It creates a relation apartment with three attributes as specified. The attribute ownername cannot be null because it is the primary key of the relation.

10. What does the notnull integrity constraint do?

- a) It ensures that at least one tuple is present in the relation
- b) It ensures that at least one foreign key is present in the relation
- c) It ensures that all tuples have a finite value on a specified attribute
- d) It ensures that all tuples have finite attributes on all the relations

View Answer

Answer: c

Explanation: The notnull integrity constraint ensures that all the tuples have a finite value on the specified attribute in the relation. It avoids the specification of null values.

1. The on condition appears at the _____ of the join expression

- a) Beginning
- b) End
- c) Between
- d) The on condition is not related to join expression

View Answer

Answer: b

Explanation: The on condition appears at the end of the join expression. Because it states the condition that the relations under the join operations get matched based on.

2. What is the difference between a join and an outer join operation?

- a) There is no difference
- b) Join preserves a few tuples that are otherwise lost in the outer join
- c) Outer join preserves a few tuples that are otherwise lost in the join
- d) An outer join can be used only on outer queries whereas a join operation can be used in Subqueries

View Answer

Answer: c

Explanation: The outer join operation preserves a few tuples that are otherwise lost in the join operation. The outer join operation preserves the tuples to the right of the operation.

3. The join operations that do not retain mismatched tuples are called as _____ operations

- a) outer join
- b) natural join
- c) full outer join
- d) inner join

View Answer

Answer: d

Explanation: The join operations that do not retain mismatched tuples are called as inner join operations. The inner join operations do not preserve any tuples that are otherwise preserved in the outer join operation.

4. What is the function of a left outer join?

- a) It preserves tuples only in the relation named before the operation
- b) It preserves tuples only in the relation named after the operation
- c) It preserved tuples in the relations named on both the sides of the operation
- d) It does not preserve any tuples on either side of the relation

View Answer

Answer: a

Explanation: The left outer join operation preserves the tuples named before the operation.

5. What is the function of a full outer join?

- a) It preserves tuples only in the relation named before the operation
- b) It preserves tuples only in the relation named after the operation
- c) It preserved tuples in the relations named on both the sides of the operation
- d) It does not preserve any tuples on either side of the relation

View Answer

Answer: c

Explanation: The full outer join operation preserves the tuples named on both the sides of the operation. Unlike the inner join, outer joins preserve tuples from either or both sides of the operation.

6. What is the function of a right outer join?

- a) It preserves tuples only in the relation named before the operation
- b) It preserves tuples only in the relation named after the operation
- c) It preserved tuples in the relations named on both the sides of the operation
- d) It does not preserve any tuples on either side of the relation

View Answer

Answer: b

Explanation: The right outer join operation preserves the tuples named after the operation.

7. What is the function of inner join?

- a) It preserves tuples only in the relation named before the operation
- b) It preserves tuples only in the relation named after the operation
- c) It preserved tuples in the relations named on both the sides of the operation
- d) It does not preserve any tuples on either side of the relation

View Answer

Answer: d

Explanation: The join operations that do not retain mismatched tuples are called as inner join operations. The inner join operation does not preserve any tuples on either side of the relation.

8. State true or false: on and where behave differently for outer join

- a) True

b) False

View Answer

Answer: a

Explanation: The on condition is a part of the outer join syntax but the where clause isn't.

9. Which off the following is not a valid type of join?

a) left outer join

b) outer join

c) join

d) full join

View Answer

Answer: d

Explanation: There is no such join called as full join. There is a full outer join but a full join does not exist.

10. If a left outer join is performed and the tuple on the left hand side does not match with the tuple on the right hand side, what happens to the values that are preserved on the left hand side?

a) They are given null values

b) They are given a random value

c) The user is asked to enter data

d) The query is declared invalid by the compiler

View Answer

Answer: a

Explanation: If a left outer join is performed and the tuple on the left hand side does not match with the tuple on the right hand side, the remaining values are given a null value.

1. The on condition appears at the _____ of the join expression

a) Beginning

b) End

c) Between

d) The on condition is not related to join expression

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Answer: b

Explanation: The on condition appears at the end of the join expression. Because it states the condition that the relations under the join operations get matched based on.

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b) Join preserves a few tuples that are otherwise lost in the outer join

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a) outer join

b) natural join

c) full outer join

d) inner join

[View Answer](#)

Answer: d

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[View Answer](#)

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[View Answer](#)

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6. What is the function of a right outer join?

a) It preserves tuples only in the relation named before the operation

b) It preserves tuples only in the relation named after the operation

c) It preserved tuples in the relations named on both the sides of the operation

d) It does not preserve any tuples on either side of the relation

[View Answer](#)

Answer: b

Explanation: The right outer join operation preserves the tuples named after the operation.

7. What is the function of inner join?

a) It preserves tuples only in the relation named before the operation

b) It preserves tuples only in the relation named after the operation

c) It preserved tuples in the relations named on both the sides of the operation

d) It does not preserve any tuples on either side of the relation

[View Answer](#)

Answer: d

Explanation: The join operations that do not retain mismatched tuples are called as inner join operations. The inner join operation does not preserve any tuples on either side of the relation.

8. State true or false: on and where behave differently for outer join

a) True

b) False

[View Answer](#)

Answer: a

Explanation: The on condition is a part of the outer join syntax but the where clause isn't.

9. Which off the following is not a valid type of join?

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- d) full join

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- a) They are given null values
- b) They are given a random value
- c) The user is asked to enter data
- d) The query is declared invalid by the compiler

View Answer

Answer: a

Explanation: If a left outer join is performed and the tuple on the left hand side does not match with the tuple on the right hand side, the remaining values are given a null value.

1. A _____ indicates an absent value that may exist but be unknown or that may not exist at all.

- a) Empty tuple
- b) New value
- c) Null value
- d) Old value

View Answer

Answer: c

Explanation: None.

2. If the attribute phone number is included in the relation all the values need not be entered into the phone number column. This type of entry is given as

- a) 0
- b) –
- c) Null
- d) Empty space

View Answer

Answer: c

Explanation: Null is used to represent the absence of a value.

3. The predicate in a where clause can involve Boolean operations such as and. The result of true and unknown is _____ false and unknown is _____ while unknown and unknown is _____

- a) Unknown, unknown, false
- b) True, false, unknown
- c) True, unknown, unknown
- d) Unknown, false, unknown

View Answer

Answer: d

Explanation: None.

4.

```
SELECT name
FROM instructor
WHERE salary IS NOT NULL;
```

Selects

- a) Tuples with null value
- b) Tuples with no null values
- c) Tuples with any salary
- d) All of the mentioned

View Answer

Answer: b

Explanation: Not null constraint removes the tuples of null values.

5. In an employee table to include the attributes whose value always have some value which of the following constraint must be used?

- a) Null
- b) Not null
- c) Unique
- d) Distinct

View Answer

Answer: b

Explanation: Not null constraint removes the tuples of null values.

6. Using the _____ clause retains only one copy of such identical tuples.

- a) Null
- b) Unique
- c) Not null
- d) Distinct

View Answer

Answer: d

Explanation: Unique is a constraint.

7.

```
CREATE TABLE employee (id INTEGER, name VARCHAR(20), salary NOT NULL);
INSERT INTO employee VALUES (1005, Rach, 0);
INSERT INTO employee VALUES (1007, Ross, );
INSERT INTO employee VALUES (1002, Joey, 335);
```

Some of these insert statements will produce an error. Identify the statement.

- a) Insert into employee values (1005,Rach,0);
- b) Insert into employee values (1002,Joey,335);
- c) Insert into employee values (1007,Ross,);
- d) None of the mentioned

View Answer

Answer: c

Explanation: Not null constraint is specified which means some value (can include 0 also) should be given.

8. The primary key must be

- a) Unique
- b) Not null
- c) Both Unique and Not null

d) Either Unique or Not null

View Answer

Answer: c

Explanation: Primary key must satisfy unique and not null condition for sure.

9. You attempt to query the database with this command:

```
SELECT nvl (100 / quantity, NONE)
FROM inventory;
```

Why does this statement cause an error when QUANTITY values are null?

a) The expression attempts to divide by a null value

b) The data types in the conversion function are incompatible

c) The character string none should be enclosed in single quotes (' ')

d) A null value used in an expression cannot be converted to an actual value

View Answer

Answer: a

Explanation: The expression attempts to divide by a null value is erroneous in sql.

10. The result of _____ unknown is unknown.

a) Xor

b) Or

c) And

d) Not

View Answer

Answer: d

Explanation: Since unknown does not hold any value the value cannot have a reverse value.

1. A _____ indicates an absent value that may exist but be unknown or that may not exist at all.

a) Empty tuple

b) New value

c) Null value

d) Old value

View Answer

Answer: c

Explanation: None.

2. If the attribute phone number is included in the relation all the values need not be entered into the phone number column. This type of entry is given as

a) 0

b) –

c) Null

d) Empty space

View Answer

Answer: c

Explanation: Null is used to represent the absence of a value.

3. The predicate in a where clause can involve Boolean operations such as and. The result of true and unknown is _____ false and unknown is _____ while unknown and unknown is _____

a) Unknown, unknown, false

b) True, false, unknown

c) True, unknown, unknown

d) Unknown, false, unknown

View Answer

Answer: d

Explanation: None.

4.

```
SELECT name  
FROM instructor  
WHERE salary IS NOT NULL;
```

Selects

- a) Tuples with null value
- b) Tuples with no null values
- c) Tuples with any salary
- d) All of the mentioned

View Answer

Answer: b

Explanation: Not null constraint removes the tuples of null values.

5. In an employee table to include the attributes whose value always have some value which of the following constraint must be used?

- a) Null
- b) Not null
- c) Unique
- d) Distinct

View Answer

Answer: b

Explanation: Not null constraint removes the tuples of null values.

6. Using the _____ clause retains only one copy of such identical tuples.

- a) Null
- b) Unique
- c) Not null
- d) Distinct

View Answer

Answer: d

Explanation: Unique is a constraint.

7.

```
CREATE TABLE employee (id INTEGER, name VARCHAR(20), salary NOT NULL);  
INSERT INTO employee VALUES (1005, Rach, 0);  
INSERT INTO employee VALUES (1007, Ross, );  
INSERT INTO employee VALUES (1002, Joey, 335);
```

Some of these insert statements will produce an error. Identify the statement.

- a) Insert into employee values (1005,Rach,0);
- b) Insert into employee values (1002,Joey,335);
- c) Insert into employee values (1007,Ross,);
- d) None of the mentioned

View Answer

Answer: c

Explanation: Not null constraint is specified which means some value (can include 0 also) should be given.

8. The primary key must be

- a) Unique
- b) Not null

- c) Both Unique and Not null
- d) Either Unique or Not null

View Answer

Answer: c

Explanation: Primary key must satisfy unique and not null condition for sure.

9. You attempt to query the database with this command:

```
SELECT nvl (100 / quantity, NONE)
FROM inventory;
```

Why does this statement cause an error when QUANTITY values are null?

- a) The expression attempts to divide by a null value
- b) The data types in the conversion function are incompatible
- c) The character string none should be enclosed in single quotes (' ')
- d) A null value used in an expression cannot be converted to an actual value

View Answer

Answer: a

Explanation: The expression attempts to divide by a null value is erroneous in sql.

10. The result of _____unknown is unknown.

- a) Xor
- b) Or
- c) And
- d) Not

View Answer

Answer: d

Explanation: Since unknown does not hold any value the value cannot have a reverse value.

1. To include integrity constraint in an existing relation use :

- a) Create table
- b) Modify table
- c) Alter table
- d) Drop table

View Answer

Answer: c

Explanation: SYNTAX – alter table table-name add constraint, where constraint can be any constraint on the relation.

2. Which of the following is not an integrity constraint?

- a) Not null
- b) Positive
- c) Unique
- d) Check 'predicate'

View Answer

Answer: b

Explanation: Positive is a value and not a constraint.

3.

```
CREATE TABLE Employee (Emp_id NUMERIC NOT NULL, Name VARCHAR(20) , dept_name
VARCHAR(20), Salary NUMERIC UNIQUE (Emp_id,Name));
INSERT INTO Employee VALUES (1002, Ross, CSE, 10000)
INSERT INTO Employee VALUES (1006, Ted, Finance, );
INSERT INTO Employee VALUES (1002, Rita, Sales, 20000);
```

What will be the result of the query?

- a) All statements executed

- b) Error in create statement
- c) Error in insert into Employee values(1006,Ted,Finance,);
- d) Error in insert into Employee values(1008,Ross,Sales,20000);

View Answer

Answer: d

Explanation: The not null specification prohibits the insertion of a null value for the attribute. The unique specification says that no two tuples in the relation can be equal on all the listed attributes.

4.

```
CREATE TABLE Manager (ID NUMERIC, Name VARCHAR(20), budget NUMERIC, Details VARCHAR(30));
```

In order to ensure that the value of budget is non-negative which of the following should be used?

- a) Check(budget>0)
- b) Check(budget<0)
- c) Alter(budget>0)
- d) Alter(budget<0)

View Answer

Answer: a

Explanation: A common use of the check clause is to ensure that attribute values satisfy specified conditions, in effect creating a powerful type system.

5. Foreign key is the one in which the _____ of one relation is referenced in another relation.

- a) Foreign key
- b) Primary key
- c) References
- d) Check constraint

View Answer

Answer: b

Explanation: The foreign-key declaration specifies that for each course tuple, the department name specified in the tuple must exist in the department relation.

6.

```
CREATE TABLE course  
(  
    . . .  
    FOREIGN KEY (dept name) REFERENCES department  
    . . . ) ;
```

Which of the following is used to delete the entries in the referenced table when the tuple is deleted in course table?

- a) Delete
- b) Delete cascade
- c) Set null
- d) All of the mentioned

View Answer

Answer: b

Explanation: The delete “cascades” to the course relation, deletes the tuple that refers to the department that was deleted.

7. Domain constraints, functional dependency and referential integrity are special forms of

- a) Foreign key

- b) Primary key
- c) Assertion
- d) Referential constraint

View Answer

Answer: c

Explanation: An assertion is a predicate expressing a condition we wish the database to always satisfy.

8. Which of the following is the right syntax for the assertion?

- a) Create assertion 'assertion-name' check 'predicate';
- b) Create assertion check 'predicate' 'assertion-name';
- c) Create assertions 'predicates';
- d) All of the mentioned

View Answer

Answer: a

Explanation: None.

9. Data integrity constraints are used to:

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

View Answer

Answer: c

Explanation: None.

10. Which of the following can be addressed by enforcing a referential integrity constraint?

- a) All phone numbers must include the area code
- b) Certain fields are required (such as the email address, or phone number) before the record is accepted
- c) Information on the customer must be known before anything can be sold to that customer
- d) When entering an order quantity, the user must input a number and not some text (i.e., 12 rather than 'a dozen')

View Answer

Answer: c

Explanation: The information can be referred to and obtained.

1. Which of the following gives a logical structure of the database graphically?

- a) Entity-relationship diagram
- b) Entity diagram
- c) Database diagram
- d) Architectural representation

View Answer

Answer: a

Explanation: E-R diagrams are simple and clear—qualities that may well account in large part for the widespread use of the E-R model.

2. The entity relationship set is represented in E-R diagram as

- a) Double diamonds
- b) Undivided rectangles
- c) Dashed lines
- d) Diamond

View Answer

Answer: d

Explanation: Dashed lines link attributes of a relationship set to the relationship set.

3. The Rectangles divided into two parts represents

- a) Entity set
- b) Relationship set
- c) Attributes of a relationship set
- d) Primary key

View Answer

Answer: a

Explanation: The first part of the rectangle, contains the name of the entity set. The second part contains the names of all the attributes of the entity set.

4. Consider a directed line(->) from the relationship set advisor to both entity sets instructor and student. This indicates _____ cardinality

- a) One to many
- b) One to one
- c) Many to many
- d) Many to one

View Answer

Answer: b

Explanation: This indicates that an instructor may advise at most one student, and a student may have at most one advisor.

5. We indicate roles in E-R diagrams by labeling the lines that connect _____ to

- a) Diamond , diamond
- b) Rectangle, diamond
- c) Rectangle, rectangle
- d) Diamond, rectangle

View Answer

Answer: d

Explanation: Diamond represents a relationship set and rectangle represents a entity set.

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

- a) Strong entity set
- b) Variant set
- c) Weak entity set
- d) Variable set

View Answer

Answer: c

Explanation: An entity set that has a primary key is termed a strong entity set.

7. For a weak entity set to be meaningful, it must be associated with another entity set, called the

- a) Identifying set
- b) Owner set
- c) Neighbour set
- d) Strong entity set

View Answer

Answer: a

Explanation: Every weak entity must be associated with an identifying entity; that is, the weak entity set is said to be existence dependent on the identifying entity set. The

identifying entity set is said to own the weak entity set that it identifies. It is also called as owner entity set.

8. Weak entity set is represented as

- a) Underline
- b) Double line
- c) Double diamond
- d) Double rectangle

View Answer

Answer: c

Explanation: An entity set that has a primary key is termed a strong entity set.

9. If you were collecting and storing information about your music collection, an album would be considered a(n) _____

- a) Relation
- b) Entity
- c) Instance
- d) Attribute

View Answer

Answer: b

Explanation: An entity set is a logical container for instances of an entity type and instances of any type derived from that entity type.

10. What term is used to refer to a specific record in your music database; for instance; information stored about a specific album?

- a) Relation
- b) Instance
- c) Table
- d) Column

View Answer

Answer: b

Explanation: The environment of database is said to be an ins

- a) Entity set
- b) Attribute set
- c) Relation set
- d) Entity model

View Answer

Answer: a

Explanation: An entity is a "thing" or "object" in the real world that is distinguishable from all other objects.

2. Entity is a _____

- a) Object of relation
- b) Present working model
- c) Thing in real world
- d) Model of relation

View Answer

Answer: c

Explanation: For example, each person in a university is an entity.

3. The descriptive property possessed by each entity set is _____

- a) Entity
- b) Attribute
- c) Relation

d) Model

View Answer

Answer: b

Explanation: Possible attributes of the instructor entity set are ID, name, dept name, and salary.

4. The function that an entity plays in a relationship is called that entity's _____

a) Participation

b) Position

c) Role

d) Instance

View Answer

Answer: c

Explanation: A relationship is an association among several entities.

5. The attribute *name* could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called

a) Simple attribute

b) Composite attribute

c) Multivalued attribute

d) Derived attribute

View Answer

Answer: b

Explanation: Composite attributes can be divided into subparts (that is, other attributes).

6. The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is

a) Single valued

b) Multi valued

c) Composite

d) Derived

View Answer

Answer: d

Explanation: The value for this type of attribute can be derived from the values of other related attributes or entities.

7. Not applicable condition can be represented in relation entry as

a) NA

b) 0

c) NULL

d) Blank Space

View Answer

Answer: c

Explanation: NULL always represents that the value is not present.

8. Which of the following can be a multivalued attribute?

a) Phone_number

b) Name

c) Date_of_birth

d) All of the mentioned

View Answer

Answer: a

Explanation: Name and Date_of_birth cannot hold more than 1 value.

9. Which of the following is a single valued attribute

a) Register_number

- b) Address
- c) SUBJECT_TAKEN
- d) Reference

View Answer

Answer: a

Explanation: None.

10. In a relation between the entities the type and condition of the relation should be specified. That is called as _____ attribute.

- a) Descriptive
- b) Derived
- c) Recursive
- d) Relative

View Answer

Answer: a

Explanation: Consider the entity sets student and section, which participate in a relationship set takes. We may wish to store a descriptive attribute grade with the relationship to record the grade that a student got in the class.

1. The entity set person is classified as student and employee. This process is called

-
- a) Generalization
 - b) Specialization
 - c) Inheritance
 - d) Constraint generalization

View Answer

Answer: b

Explanation: The process of designating subgroupings within an entity set is called specialization.

2. Which relationship is used to represent a specialization entity?

- a) ISA
- b) AIS
- c) ONIS
- d) WHOIS

View Answer

Answer: a

Explanation: In terms of an E-R diagram, specialization is depicted by a hollow arrow-head pointing from the specialized entity to the other entity.

3. The refinement from an initial entity set into successive levels of entity subgroupings represents a _____ design process in which distinctions are made explicit.

- a) Hierarchy
- b) Bottom-up
- c) Top-down
- d) Radical

View Answer

Answer: c

Explanation: The design process may also proceed in a bottom-up manner, in which multiple entity sets are synthesized into a higher-level entity set on the basis of common features.

4. There are similarities between the instructor entity set and the secretary entity set in the sense that they have several attributes that are conceptually the same across the two entity

sets: namely, the identifier, name, and salary attributes. This process is called

- a) Commonality
- b) Specialization
- c) Generalization
- d) Similarity

View Answer

Answer: c

Explanation: Generalization is used to emphasize the similarities among lower-level entity sets and to hide the differences.

5. If an entity set is a lower-level entity set in more than one ISA relationship, then the entity set has

- a) Hierarchy
- b) Multilevel inheritance
- c) Single inheritance
- d) Multiple inheritance

View Answer

Answer: d

Explanation: The attributes of the higher-level entity sets are said to be inherited by the lower-level entity sets.

6. A _____ constraint requires that an entity belong to no more than one lower-level entity set.

- a) Disjointness
- b) Uniqueness
- c) Special
- d) Relational

View Answer

Answer: a

Explanation: For example, student entity can satisfy only one condition for the student type attribute; an entity can be either a graduate student or an undergraduate student, but cannot be both.

7. Consider the employee work-team example, and assume that certain employees participate in more than one work team. A given employee may therefore appear in more than one of the team entity sets that are lower level entity sets of employee. Thus, the generalization is _____

- a) Overlapping
- b) Disjointness
- c) Uniqueness
- d) Relational

View Answer

Answer: a

Explanation: In overlapping generalizations, the same entity may belong to more than one lower-level entity set within a single generalization.

8. The completeness constraint may be one of the following: Total generalization or specialization, Partial generalization or specialization. Which is the default?

- a) Total
- b) Partial
- c) Should be specified
- d) Cannot be determined

View Answer

Answer: b

Explanation: Partial generalization or specialization – Some higher-level entities may not belong to any lower-level entity set.

9. Functional dependencies are a generalization of

- a) Key dependencies
- b) Relation dependencies
- c) Database dependencies
- d) None of the mentioned

View Answer

Answer: a

Explanation: The subclasses are combined to form the superclass.

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

- a) Child
- b) Owner
- c) Dominant
- d) All of the mentioned

View Answer

Answer: a

Explanation: A parent may be called as a strong entity.

1. _____ express the number of entities to which another entity can be associated via a relationship set.

- a) Mapping Cardinality
- b) Relational Cardinality
- c) Participation Constraints
- d) None of the mentioned

View Answer

Answer: a

Explanation: Mapping cardinality is also called as cardinality ratio.

2. An entity in A is associated with at most one entity in B, and an entity in B is associated with at most one entity in A. This is called as

- a) One-to-many
- b) One-to-one
- c) Many-to-many
- d) Many-to-one

View Answer

Answer: b

Explanation: Here one entity in one set is related to one one entity in other set.

3. An entity in A is associated with at most one entity in B. An entity in B, however, can be associated with any number (zero or more) of entities in A.

- a) One-to-many
- b) One-to-one
- c) Many-to-many
- d) Many-to-one

View Answer

Answer: d

Explanation: Here more than one entity in one set is related to one one entity in other set.

4. Data integrity constraints are used to:

- a) Control who is allowed access to the data
- b) Ensure that duplicate records are not entered into the table

- c) Improve the quality of data entered for a specific property
- d) Prevent users from changing the values stored in the table

View Answer

Answer: c

Explanation: The data entered will be in a particular cell (i.e., table column).

5. Establishing limits on allowable property values, and specifying a set of acceptable, predefined options that can be assigned to a property are examples of:

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

View Answer

Answer: b

Explanation: Only particular value satisfying the constraints are entered in the column.

6. Which of the following can be addressed by enforcing a referential integrity constraint?

- a) All phone numbers must include the area code
- b) Certain fields are required (such as the email address, or phone number) before the record is accepted
- c) Information on the customer must be known before anything can be sold to that customer
- d) Then entering an order quantity, the user must input a number and not some text (i.e., 12 rather than 'a dozen')

View Answer

Answer: c

Explanation: None.

7. _____ is a special type of integrity constraint that relates two relations & maintains consistency across the relations.

- a) Entity Integrity Constraints
- b) Referential Integrity Constraints
- c) Domain Integrity Constraints
- d) Domain Constraints

View Answer

Answer: b

Explanation: None.

8. Which one of the following uniquely identifies the elements in the relation?

- a) Secondary Key
- b) Primary key
- c) Foreign key
- d) Composite key

View Answer

Answer: b

Explanation: Primary key checks for not null and uniqueness constraint.

9. Drop Table cannot be used to drop a table referenced by a _____ constraint.

- a) Local Key
- b) Primary Key
- c) Composite Key
- d) Foreign Key

View Answer

Answer: d

Explanation: Foreign key is used when primary key of one relation is used in another relation.

10. _____ is preferred method for enforcing data integrity

- a) Constraints
- b) Stored Procedure
- c) Triggers
- d) Cursors

View Answer

Answer: a

Explanation: Constraints are specified to restrict entries in the relation.

1. In the _____ normal form, a composite attribute is converted to individual attributes.

- a) First
- b) Second
- c) Third
- d) Fourth

View Answer

Answer: a

Explanation: The first normal form is used to eliminate the duplicate information.

2. A table on the many side of a one to many or many to many relationship must:

- a) Be in Second Normal Form (2NF)
- b) Be in Third Normal Form (3NF)
- c) Have a single attribute key
- d) Have a composite key

View Answer

Answer: d

Explanation: The relation in second normal form is also in first normal form and no partial dependencies on any column in primary key.

3. Tables in second normal form (2NF):

- a) Eliminate all hidden dependencies
- b) Eliminate the possibility of a insertion anomalies
- c) Have a composite key
- d) Have all non key fields depend on the whole primary key

View Answer

Answer: a

Explanation: The relation in second normal form is also in first normal form and no partial dependencies on any column in primary key.

4. Which-one of the following statements about normal forms is FALSE?

- a) BCNF is stricter than 3 NF
- b) Lossless, dependency -preserving decomposition into 3 NF is always possible
- c) Loss less, dependency – preserving decomposition into BCNF is always possible
- d) Any relation with two attributes is BCNF

View Answer

Answer: c

Explanation: We say that the decomposition is a lossless decomposition if there is no loss of information by replacing r (R) with two relation schemas r1(R1) and r2(R2).

5. Functional Dependencies are the types of constraints that are based on _____

- a) Key

- b) Key revisited
- c) Superset key
- d) None of the mentioned

View Answer

Answer: a

Explanation: Key is the basic element needed for the constraints.

6. Which is a bottom-up approach to database design that design by examining the relationship between attributes:

- a) Functional dependency
- b) Database modeling
- c) Normalization
- d) Decomposition

View Answer

Answer: c

Explanation: Normalisation is the process of removing redundancy and unwanted data.

7. Which forms simplifies and ensures that there are minimal data aggregates and repetitive groups:

- a) 1NF
- b) 2NF
- c) 3NF
- d) All of the mentioned

View Answer

Answer: c

Explanation: The first normal form is used to eliminate the duplicate information.

8. Which forms has a relation that possesses data about an individual entity:

- a) 2NF
- b) 3NF
- c) 4NF
- d) 5NF

View Answer

Answer: c

Explanation: A Table is in 4NF if and only if, for every one of its non-trivial multivalued dependencies $X \twoheadrightarrow Y$, X is a superkey—that is, X is either a candidate key or a superset thereof.

9. Which forms are based on the concept of functional dependency:

- a) 1NF
- b) 2NF
- c) 3NF
- d) 4NF

View Answer

Answer: c

Explanation: The table is in 3NF if every non-prime attribute of R is non-transitively dependent (i.e. directly dependent) on every superkey of R.

10.

Empdt1(empcode, name, street, city, state, pincode).

For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in

- a) 1 NF only
- b) 2 NF and hence also in 1 NF

- c) 3NF and hence also in 2NF and 1NF
- d) BCNF and hence also in 3NF, 2NF and 1NF

View Answer

Answer: b

Explanation: The relation in second normal form is also in first normal form and no partial dependencies on any column in primary key.

1. A domain is _____ if elements of the domain are considered to be indivisible units.

- a) Atomic
- b) Subatomic
- c) Substructure
- d) Subset

View Answer

Answer: a

Explanation: A set of names is an example of a nonatomic value.

2. Identify the composite attributes

- a) Salary
- b) Credits
- c) Section_id
- d) None of the mentioned

View Answer

Answer: d

Explanation: Composite attributes, such as an attribute address with component attributes street, city, state, and zip have nonatomic domains.

3. Consider the relation given below and find the maximum normal form applicable to them

- i. $R(A, B)$ WITH productions $\{ A \twoheadrightarrow B \}$
- ii. $R(A, B)$ WITH productions $\{ B \twoheadrightarrow A \}$
- iii. $R(A, B)$ WITH productions $\{ A \rightarrow B, B \twoheadrightarrow A \}$
- iv. $R(A, B, C)$ WITH productions $\{ A \twoheadrightarrow B, B \twoheadrightarrow A, AB \twoheadrightarrow C \}$

- a) i, ii and iii are in 3NF and iv is in BCNF
- b) i and ii are in BCNF and iii and iv are in 3NF
- c) All are in 3NF
- d) All are in BCNF

View Answer

Answer: d

Explanation: One of the more desirable normal forms that we can obtain is Boyce–Codd normal form (BCNF). It eliminates all redundancy that can be discovered based on functional dependencies.

4. Which one is based on multi-valued dependency:

- a) First
- b) Second
- c) Third
- d) Fourth

View Answer

Answer: d

Explanation: One of the more desirable normal forms that we can obtain is Boyce–Codd normal form (BCNF). It eliminates all redundancy that can be discovered based on functional dependencies.

5. If a relation is in BCNF, then it is also in

- a) 1 NF

- b) 2 NF
- c) 3 NF
- d) All of the mentioned

View Answer

Answer: d

Explanation: Third normal form (3NF) relaxes this constraint slightly by allowing certain nontrivial functional dependencies whose left side is not a superkey.

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

- a) First normal form
- b) Second normal form
- c) Third form
- d) Fourth normal form

View Answer

Answer: b

Explanation: Third normal form (3NF) relaxes this constraint slightly by allowing certain nontrivial functional dependencies whose left side is not a superkey.

7. If an attribute of a composite key is dependent on an attribute of the other composite key, a normalization called _____ is needed.

- a) DKNF
- b) BCNF
- c) Fourth
- d) Third

View Answer

Answer: b

Explanation: BCNF eliminates all redundancy that can be discovered based on functional dependencies.

8. The term for information that describes what type of data is available in a database is:

- a) Data dictionary
- b) data repository
- c) Index data
- d) Metadata

View Answer

Answer: d

Explanation: Meta data is generally data about a data.

9. A data type that creates unique numbers for key columns in Microsoft Access is:

- a) Autonumber
- b) Boolean
- c) Sequential key
- d) Sequential number

View Answer

Answer: a

Explanation: This can be taken as a primary key.

10. A dependency exist between two columns when

- a) Together they constitute a composite key for the table
- b) Knowing the value in one column determines the value stored in another column
- c) The table is in 3NF
- d) Together they constitute a foreign key

View Answer

Answer: a

Explanation: Given a set F of functional dependencies on a schema, we can prove that certain other functional dependencies also hold on the schema.

1. A domain is _____ if elements of the domain are considered to be indivisible units.

- a) Atomic
- b) Subatomic
- c) Substructure
- d) Subset

View Answer

Answer: a

Explanation: A set of names is an example of a nonatomic value.

2. Identify the composite attributes

- a) Salary
- b) Credits
- c) Section_id
- d) None of the mentioned

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Explanation: Composite attributes, such as an attribute address with component attributes street, city, state, and zip have nonatomic domains.

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- iii. $R(A, B)$ WITH productions $\{ A \rightarrow B, B \twoheadrightarrow A \}$
- iv. $R(A, B, C)$ WITH productions $\{ A \twoheadrightarrow B, B \twoheadrightarrow A, AB \twoheadrightarrow C \}$

- a) i, ii and iii are in 3NF and iv is in BCNF
- b) i and ii are in BCNF and iii and iv are in 3NF
- c) All are in 3NF
- d) All are in BCNF

View Answer

Answer: d

Explanation: One of the more desirable normal forms that we can obtain is Boyce–Codd normal form (BCNF). It eliminates all redundancy that can be discovered based on functional dependencies.

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- c) Third
- d) Fourth

View Answer

Answer: d

Explanation: One of the more desirable normal forms that we can obtain is Boyce–Codd normal form (BCNF). It eliminates all redundancy that can be discovered based on functional dependencies.

5. If a relation is in BCNF, then it is also in

- a) 1 NF
- b) 2 NF
- c) 3 NF

d) All of the mentioned

View Answer

Answer: d

Explanation: Third normal form (3NF) relaxes this constraint slightly by allowing certain nontrivial functional dependencies whose left side is not a superkey.

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

a) First normal form

b) Second normal form

c) Third form

d) Fourth normal form

View Answer

Answer: b

Explanation: Third normal form (3NF) relaxes this constraint slightly by allowing certain nontrivial functional dependencies whose left side is not a superkey.

7. If an attribute of a composite key is dependent on an attribute of the other composite key, a normalization called _____ is needed.

a) DKNF

b) BCNF

c) Fourth

d) Third

View Answer

Answer: b

Explanation: BCNF eliminates all redundancy that can be discovered based on functional dependencies.

8. The term for information that describes what type of data is available in a database is:

a) Data dictionary

b) data repository

c) Index data

d) Metadata

View Answer

Answer: d

Explanation: Meta data is generally data about a data.

9. A data type that creates unique numbers for key columns in Microsoft Access is:

a) Autonumber

b) Boolean

c) Sequential key

d) Sequential number

View Answer

Answer: a

Explanation: This can be taken as a primary key.

10. A dependency exist between two columns when

a) Together they constitute a composite key for the table

b) Knowing the value in one column determines the value stored in another column

c) The table is in 3NF

d) Together they constitute a foreign key

View Answer

Answer: a

Explanation: Given a set F of functional dependencies on a schema, we can prove that certain other functional dependencies also hold on the schema.

1. Let us consider *phone_number*, which can take single or several values .
Treating *phone_number* as an _____ permits instructors to have several phone numbers (including zero) associated with them.

- a) Entity
- b) Attribute
- c) Relation
- d) Value

View Answer

Answer: a

Explanation: Treating a phone as an attribute *phone_number* implies that instructors have precisely one phone number each.

2. The total participation by entities is represented in E-R diagram as

- a) Dashed line
- b) Double line
- c) Double rectangle
- d) Circle

View Answer

Answer: b

Explanation: It is used to represent the relation between several attributes.

3. Given the basic ER and relational models, which of the following is INCORRECT?

- a) An attribute of an entity can have more than one value
- b) An attribute of an entity can be composite
- c) In a row of a relational table, an attribute can have more than one value
- d) In a row of a relational table, an attribute can have exactly one value or a NULL value

View Answer

Answer: c

Explanation: It is possible to have several values for a single attribute provide it is a multi-valued attribute.

4. Which of the following indicates the maximum number of entities that can be involved in a relationship?

- a) Minimum cardinality
- b) Maximum cardinality
- c) ERD
- d) Greater Entity Count

View Answer

Answer: b

Explanation: In SQL (Structured Query Language), the term cardinality refers to the uniqueness of data values contained in a particular column (attribute) of a database table.

5. In E-R diagram generalization is represented by

- a) Ellipse
- b) Dashed ellipse
- c) Rectangle
- d) Triangle

View Answer

Answer: d

Explanation: Ellipse represents attributes, rectangle represents entity.

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

- a) Unary
- b) Binary

- c) Ternary
- d) Quaternary

View Answer

Answer: b

Explanation: Binary word usually represents two attributes.

7. Which of the following is a low level operator?

- a) Insert
- b) Update
- c) Delete
- d) Directory

View Answer

Answer: d

Explanation: Directory is a low level to word on in file system.

8. Key to represent relationship between tables is called

- a) Primary key
- b) Secondary Key
- c) Foreign Key
- d) None of the mentioned

View Answer

Answer: c

Explanation: Primary key of one relation used as an attribute in another relation is called foreign key.

9. A window into a portion of a database is

- a) Schema
- b) View
- c) Query
- d) Data dictionary

View Answer

Answer: b

Explanation: View is a logical portion of a database which is needed by some users.

10. 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 mentioned

View Answer

Answer: a

Explanation: Using the two relationships mother and father provides us a record of a child's mother, even if we are not aware of the father's identity; a null value would be required if the ternary relationship parent is used. Using binary relationship sets is preferable in this case.