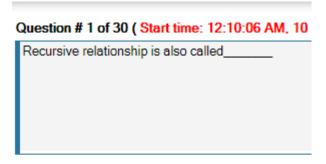**File 5 of 5**

Grand Quiz Cs403 – DBMS

Solved by John

Confirmed Correct = 30 (as per my understanding)

Not sure = 0

*References of repeated question not attached.

Recursive relationship is also called_____

Select the correct option

- ● Unary

  Grand Quiz
  Cs403   - DBMS
  Solved by John

- ○ Ternary

- ○ Primary

- ○ Secondary

In your opinion, why relational database is widely acceptable?

Select the correct option

○ Due to its complexity

○ Due to its approach

○ Due to its dependencies

● Due to its strength

A software package designed to store and manage databases

Select the correct option

○ Database

◉ DBMS

○ Data model

○ Data

Each _____ of a table contains atomic/single value.

Select the correct opti

	Cell
●	

Grand Quiz
Cs403   - DBMS
Solved by John

	Row
○	

	Column
○	

	Record
○	

- Each cell of a table contains atomic/single value
  A cell is the intersection of a row and a column, attribute in a particular row. The property means that is considered as a single value. In real life we

Which of the following is NOT a component of a DFD?

Select the correct option

○ Dataflow

○ Datastore

○ External entities

● Relationship between external entities

Grand Quiz
Cs403 - DBMS
Solved by John

_____ is same as Equi-Join with a slight difference.

Select the correct option

●	Natural Join
O	Semi Join
O	Outer Join
O	Theta Join

Natural Join:
This is the most common and general form of join. If we simply say join, it means the natural join. It is same as equi–join but the difference is that in natural join, the common attribute appears only once. Now, it does not matter which common attribute should be part of the output relation as the values in both are same. For Example if we take the natural join of faculty and course the output would be as under: -

Unary operations involves

Select the correct option

⦿	Only one relation
○	Only two relations
○	More than two relations
○	Not more than five relations

Grand Quiz
Cs403 - DBMS
Solved by John

Unary Operations:

These are those operations, which involve only one relation or table. These are Select and Project

In cross reference matrix attributes are mention on _____ and reports are mention on _____

Select the correct option

- Y axis, X axis

- Y axis, Z axis

- ● X axis, Y axis

  Grand Quiz
  Cs403 - DBMS
  Solved by John

- X axis, Z axis

Cross Reference Matrix

This is a tool available in the data dictionary and helps us in finding entities of the database and their associations. CRM is developed at the designing stage of the database; we can say that at the time of creation of the user views of reports for certain users we identify the material required by the users. In the cross reference matrix, on the Y axis we specify the accessible components of the database such as transitions, reports, or database objects and on the x axis we specify the attributes that will be accessed in the corresponding accessed object.

Relational Calculus is a _____ relational data manipulation language.

Select the correct option

Procedural, Informal

○

Non-Procedural, Informal

○

Procedural, Formal

○

Non-Procedural, Formal

●

Grand Quiz
Cs403 - DBMS
Solved by John

Relational Calculus

Relational Calculus is a nonprocedural formal relational data manipulation language in which the user simply specifies what data should be retrieved, but not how to retrieve it. It is an alternative standard for relational data manipulation languages. The relational calculus is not related to the familiar differential and integral calculus in mathematics, but takes its name from a branch of symbolic logic called the predicate calculus. It has two following forms: -

- **Tuple Oriented Relational Calculus**

- **Domain Oriented Relational Calculus**

_____ is the first comprehensive complete database design.

Select the correct option

Logical database design

Relational Database Design

Conceptual Database Design

Grand Quiz
Cs403 - DBMS
Solved by John

Hierarchical Database Design

Entity-Relationship Data Model

It is a semantic data model that is used for the graphical representation of the conceptual database design. We have discussed in the previous lecture that semantic data models provide more constructs that is why a database design in a semantic data model can contain/represent more details. With a semantic data model, it becomes easier to design the database, at the first place, and secondly it is easier to understand later. We also know that conceptual database is our first comprehensive design. It is independent of any particular implementation of the database, that is, the conceptual database design expressed in E-R data model can be implemented using any DBMS. For that we will have to transform the conceptual database design from E-R data model to the data model of the

The database deals with large amount of data. This property is called

Select the correct option

Database design

Scalability

Grand Quiz
Cs403   - DBMS
Solved by John

Concurrency

Robustness

o **Efficiency and Scalability:** How does the database cope with large amounts of data?

Which of the following is NOT an entity?

Select the correct option

⦿	Employee
○	Hobby
○	Student
○	Playground

Grand Quiz
Cs403   - DBMS
Solved by John

Grand Quiz (Cs403 + CS301)
Cs403, Faisal Kaleem, Imran, Princess, Saye, Wajeeha, +92 300 4825384, +92 301 5885821, +92 303 6379806, +92 304 789...

12:28 AM

A is correct   12:29 AM

Select the correct option

○	Employee
○	Hobby
○	Student
○	Playground

12:29 AM ✓

iska bataen   12:30 AM ✓

employee is a table other 3 are its attributes   12:30 AM ✓

An attribute of one entity is associated with another attribute of the same entity is called:

Select the correct option

●	Recursive relationship
○	Binary relationship
○	One to many relationship
○	Many to many relationship

Recursive Relationship:
This is the situation when any attribute of one entity is associated with another attribute of the same entity. Such a link initiates from one entity and terminates on the same entity.

If many instances of the "Book" entity are associated with the many instances of the "Student" entity, then the relationship between them is:

Select the correct option

○	One to one
○	One to many
◉	Many to many
○	Many to one

Grand Quiz
Cs403 - DBMS
Solved by John

Many to Many Relationship:

In this type of relationship one instance of first entity can be mapped with many instances of second entity. Similarly one instance of second entity can be mapped with many instances of first entity type. In many to many relationship a third table is created for the relationship, which is also called as associative entity type. Generally,

142

The relationship between department to employees is _____ .

Select the correct option

○	Many to many
○	One to one
●	One to many
○	Many to one

Grand Quiz
Cs403 - DBMS
Solved by John

A _____ is used to combine rows from two or more tables, based on a related column between them.

Select the correct option

- ○ Select operator

- ○ Project operator

- ● Join operation

  Grand Quiz
  Cs403 - DBMS
  Solved by John

- ○ Delete operator

Join Operation:

Join is a special form of cross product of two tables. In Cartesian product we join a tuple of one table with the tuples of the second table. But in join there is a special requirement of relationship between tuples. For example if there is a relation STUDENT and a relation BOOK then it may be required to know that how many books have been issued to any particular student. Now in this case the primary key of STUDENT that is stId is a foreign key in BOOK table through which the join can be made. We will discuss in detail the different types of joins in our next lecture.

A database state where deletion of the information about the student record deletes the course information as well is called _____.

Select the correct option

○ Insertion anomaly

○ Updation anomaly

○ Redundancy

○ Deletion anomaly

Grand Quiz
Cs403 - DBMS
Solved by John

this course yet. So we can also not insert this course. This is called as insertion anomaly which is wrong state of database. Next is the deletion anomaly. Suppose there is a course which has been enrolled by one student only. Now due to some

170

Database Management System (CS403)   VU

reason, we want to delete the record of student. But here the information about the course will also be deleted, so in this way this is the incorrect state of database in

The population of the data of the organization for which the database is created is called the _____ of the Database.

Select the correct option

●	Extension
	Intention
○	
○	Model
○	Schema

Grand Quiz
Cs403 - DBMS
Solved by John

database. **Extension** of the database is performed on the bases of a complete intention, i-e once a database has been defined it is populated with the data of the organization for which the database is created. This population of the database is also called as the extension of the database. Extension is always done according to the rules defined in the internal schema design or the intention of the database.

The conceptual database design can be transformed into any_____.

Select the correct option

⦿	Data model
◯	Database design
◯	E-R model
◯	Entity set

Grand Quiz
Cs403 - DBMS
Solved by John

As we have already discussed in previous lectures and as is given in row 2 of the above table, the conceptual database design can be transformed into any data model, like, hierarchical, network, relational or object-oriented. So the study of the logical database design requires first involves the study of the data model/(s) that we can possibly use for the purpose. However, in the current age, since early eighties, the

.

Suppose, we have two entities "Shape" and "Triangle", then which of the following is a correct statement?

Select the correct option

● Shape is a super type entity and Triangle is a sub type entity

Grand Quiz
Cs403 - DBMS
Solved by John

○ Shape is a sub type entity and Triangle is a super type entity

○ Shape and Triangle both are super type entities

○ Shape and Triangle both are sub type entities

Super types and Subtypes

Subtypes hold all the properties of their corresponding super-types. Means all those subtypes which are connected to a specific supertype will have all the properties of their supertype.

The attribute that is calculated from other attribute is called_____.

Select the correct option

●	Derived attribute	Grand Quiz Cs403 - DBMS Solved by John
○	Multi-valued attribute	
○	Composite attribute	
○	Simple attribute	

Stored or Derived Attributes:
Normally attributes are stored attributes, that is, their values are stored and accessed as such from the database. However, sometimes attributes' values are not stored as such, rather they are computed or derived based on some other value. This other value may be stored in the database or obtained some other way. For example, we may store the name, father name, address of employees, but age can be computed from date of birth. The

77

Relational data model is widely accepted due to its mathematically proven foundation and its _____.

Select the correct option

○	Complexity
●	Simplicity
○	Hierarchical structure
○	Traditional structure

Grand Quiz
Cs403 - DBMS
Solved by John

Database and Expert Systems Applications: Proceedings of the ...

T Sr] Via Don Carlo Steeb 7 37122 Verona, Italy **AN** OBJECT **MODELING** ... In fact, **relational database** management systems have **proven their** validity in **a** ... chiefly **due** to **their** simple and provable **mathematical foundations**. ... **The** deficiencies of **the relational model** for supporting complex object applications are **well** ...

Dimitris Karagiannis - 2013 - Computers

Collection of raw facts is called_____.

Select the correct option

○ Information

○ Object

○ Output

● Data

Grand Quiz
Cs403 - DBMS
Solved by John

Difference between Data and Information

Data is the collection of raw facts collected from any specific environment for a specific purpose. Data in itself does not show anything about its environment, so to get desired types of results from the data we transform it into information by applying certain

For third normal form we concentrate on relations with one _____key, and we eliminate transitive dependencies

Select the correct option

	Candidate	
●		Grand Quiz Cs403 - DBMS Solved by John
○	Composite	
○	Super key	
○	Primary key	

dependency occurs when one non-key attribute determines another non-key attribute. For third normal form we concentrate on relations with one candidate key, and we eliminate transitive dependencies. Transitive dependencies cause insertion, deletion, and update anomalies. We will now

The _____ determines that the link between two entities is optional or mandatory.

Select the correct option

○ Maximum cardinality

● Minimum cardinality

Grand Quiz
Cs403 - DBMS
Solved by John

○ Maximum degree

○ Minimum degree

Minimum Cardinality:

As the name suggests that the minimum cardinality is the inverse of the maximum cardinality so we can say that the minimum cardinality show us that how many instance of one entity can be placed in another relation at least. In simple words it can be said that the minimum cardinality tells that whether the link between two relations is optional or compulsory. It is very important to determine the minimum cardinality when designing a database because it defines the way a database system will be implemented.

91

If an entity is linked with itself, then it is called _____ relationship.

Select the correct option

○ Binary

○ Ternary

○ Nary

◉ Recursive

Changes at _____ levels of database architecture need _____ levels of user's attention

Select the correct option

○ different, different

○ same, same

○ different, same

○ same, different

LectureNo.03 - Database Management System(CS403 Lecture ...

For accessing data at different **levels** we **have** a number of **users** because not all ... the **database** and **what** information is important to be stored in the **database** from ... **architecture** **need** different **levels of users attention** for example a **change** to ...

If an entity "motor cycle" is associated with at most one "driver", then the relationship between these two entities is:

Select the correct option

- ◉ One to one

- ○ One to many

- ○ Many to many

- ○ Many to one

○ **One-to-One mapping:**

A mapping R from X to Y is one-to-one if each entity in X is associated with at most one entity in Y and vice versa.

Which levels are mostly used for Detailed DFD?

Select the correct option

- ○ Level-0, Level-1
- ○ Level-1, Level-2
- ○ Level-2, Level-3
- ● Level-3, Level-4