File 2 of 4

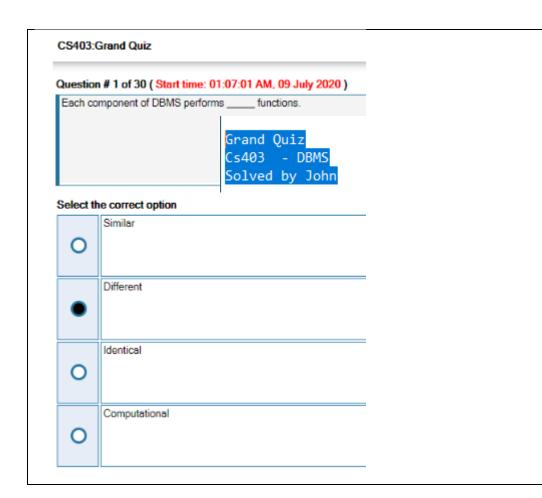
Grand Quiz

Cs403 - DBMS

Solved by John

Correct Answers with references = 23

Not sure = 7



is used to manage the database and its users. A DBMS consist of different components of subsystem that we will study about later. Each subsystem or component of the DBM performs different function(s), so a DBMS is collection of different programs but they a work jointly to manage the data stored in the database and its users. In many books and

If an ent	tity is linked with itself, then it is called relationship.
	Grand Quiz Cs403 - DBMS
Select th	Solved by John
0	Binary
0	Ternary
0	Nary
	Recursive

Not sure

Boyce - Codd Normal Form

A relation is in Boyce-Codd normal form if and only if every determinant is a candidate key. A relation R is said to be in BCNF if whenever X -> A holds in R, and A is not in X, then X is a candidate key for R. It should be noted that most relations that are in 3NF are also in BCNF. Infrequently, a 3NF relation is not in BCNF and this happens only if

- (a) the candidate keys in the relation are composite keys (that is, they are not single attributes),
- (b) there are more than one candidate keys in the relation, and
- (c) the keys are not disjoint, that is, some attributes in the keys are common.

The BCNF differs from the 3NF only when there are more than one candidate keys and the keys are composite and overlapping. Consider for example, the relationship:

relational database is Grand Quiz	Grand Quiz Cs403 - DBMS Solved by John
Cs403 - DBMS Solved by John	Select the correct option Development, implementation operation of the physical database
O one that consists of two or more tables	Creation of the system catalog
a database that is able to process tables, queries, forms, reports and macros	Monitoring and controlling database security and authorization: Setting up control
one that consists of two or more tables that are joined in some way	All of the above
the same as a flat file database	Not sure

Which o	f the following Data Model is not record based?
Select th	e correct option
0	Hierarchical Data Model
0	Network Data model
	Semantic Data Model Grand Quiz Cs403 - DBMS Solved by John
0	Relational Data model

Record Based Data Model

This is the second type of data models available to use and has three

- · Hierarchical Data Model
- Network Data model
- · Relational Data model

Question # 7 of 30 (Start time: 01:17:05 AM, 09 July 2020) Theta join is denoted mathematically as _ Select the correct option RXS 0 RXO 0 RXOS Grand Quiz Cs403 - DBMS Solved by John RXORS 0

Theta Join:

In theta join we apply the condition on input relation(s) rows are used in the cross product to be merged and inc that in normal cross product all the rows of one relation the rows of second relation, but here only selected rows product with second relation. It is denoted as under: -

 $R X \Theta S$

Question # 8 of 30 (Start time: 01:18:31 AM, 09 July 2020) When one entity instance needs instance of another entity for its existence, then it is called		Existence dependency	
vvnen o	the entity instance needs instance of another entity for its existence, then it is called	The Existence dependency:	
		This is the type of dependency which exists when one entity instance nee instance of another entity for its existence.	
Select ti	he correct option		
	Existence dependency Grand Quiz Cs403 - DBMS Solved by John		
0	Identifier dependency		
0	Referential dependency		
0	Acceptance dependency		

Question # 10 of 30 (Start time: 01:22:19 AM, 09 July 2020) Which of the following tool is used to design conceptual database design?		
Select th	e correct option	
0	SQL	
0	MS Access	
0	Oracle	
	This model is independent of any tool Cs403 - DBMS Solved by John	

Conceptual Database Design

The outcome of analysis phase is the conceptual databathrough E-R model. This design is independent of any tool can be implemented in multiple data models like network

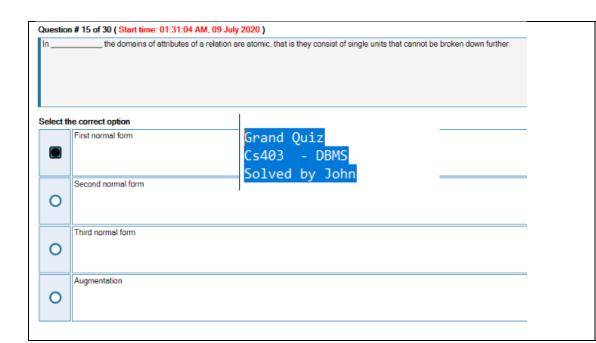
Question # 11 of 30 (Start time: 01:23:53 AM, 09 July 2020)		
Internal schema/view defines the of the data.		
Calaatt		
Select	he correct option Functionality	
0	T discondity	
	Source	
0		
	Structure Grand Quiz	
	Cs403 - DBMS_	
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	Transaction	
0		

Question	n # 12 of 30 (Start time: 01:25:45 AM, 09 July 2020)	
"Select"	and "project" are the examples of	
		p.148
Select th	ne correct option	Unary Operations:
•	Unary operations Grand Quiz Cs403 - DBMS Solved by John	These are those operations, which involve only one relation or table. These are Se and Project
0	Binary operations	
0	Ternary operations	
0	Nary operations	

Question # 13 of 30 (Start time: 01:27:23 AM, 09 July 2020) Logical database design, like conceptual database design is our		
Select th	e correct option	
0	Data model	
0	Weak entity set	
0	Strong entity set	
	Database design Grand Quiz Cs403 - DBMS Solved by John	

From this lecture we are going to discuss the logical database design phase database development process. Logical database design, like conceptual database design is our database design; it represents the structure of data that we need to see to fulfill the requirements of the users or organization for which we are developing system. However there are certain differences between the two that are presented to act to be the contract of the cont

Question	n # 14 of 30 (Start time: 01:29:22 AM, 09 July 2020)	
The Thr	ree levels architecture is useful for	p.32 level, which is stored in a specific format at the internal level. The Three levels architecture is useful for hiding the details of internal states.
Select th	he correct option	
0	Arranging the data in an organized manner.	
	Hiding the details of internal systems. Grand Quiz Cs403 - DBMS Solved by John	
0	Breaking the data access restriction.	
0	Storing definitions of the structures.	



p.167

First Normal Form:

A relation is in first normal form if and only if every attribute is single valued for a tuple. This means that each attribute in each row, or each cell of the table, cont only one value. No repeating fields or groups are allowed. An alternative was describing first normal form is to say that the domains of attributes of a relation atomic, that is they consist of single units that cannot be broken down further. To is no multivalued (repeating group) in the relation multiple values create problems performing operations like select or join. For Example there is a relation of Studential or the studential of the studential of the select or join.

tart time: 01:32:40 AM, 09 July 2020)	Binary Relationships
e established between	Binary relationships are those, which are established between two en
	Following are the three types of cardinalities for binary relationships:
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ion	
уре	
I	
Grand Quiz	
Cs403 - DBMS	
Solved by John	
ре	

Question	# 17 of 30 (Start time: 01:33:56 AM, 09 July 2020)	p.56
Which is r	not correct according to Data Flow Diagrams?	
		Data Flow Diagr
		used to design system
	DFDs show the flow of data between different processes of a specific system.	levels.
0		DFDs show the flow
	DFDs are simple, and hide complexities.	DFDs are simple, an
0	Grand Quiz Cs403 - DBMS	DFDs are Descriptiv
	DFDs provide us a way of expressing decision points. Solved by John	
	DFDs are Descriptive and links between processes describe the information flow.	
0		

ams:

tool used for deigning database systems is Data ms graphically and expresses different system de

of data between different processes o a specific d hide complexities.

e and links between processes describe the infor

_	# 18 of 30 (Start time: 01:35:25 AM, 09 July 2020)		
Which of the following is an advantage of using the Traditional File Organization?			Not sure
Select th	e correct option		
	Time consuming	•	
0			
	Data security Grand Quiz Cs403 - DBMS Solved by John		
	Simplicity		
0			
	Efficiency	-	
0			

Question # 19 of 30 (Start time: 01:37:15 AM, 09 July 2020)				
The Sel	ect operation works horizontally on the	table, on the other hand the	operates on a single table vertically.	
elect th	ne correct option			
0	Binary operator	I		
•	Project operator	Grand Quiz Cs403 - DBMS Solved by John		
0	Join operation			
0	Select Operator			

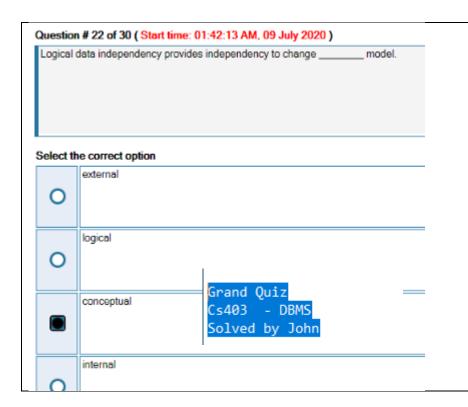
p.150

The Project Operator

The Select operation works horizontally on the table on the other has operator operates on a single table vertically, that is, it produces a vertical the table extracting the values of specified columns eliminating described to the columns of the table.

_	# 20 of 30 (Start time: 01:38:24 AM, 09 July 2020) spinion, why relational database is widely acceptable?
	e correct option Due to its complexity
0	Due to its approach
0	Due to its dependencies Due to its strength Grand Quiz
•	Cs403 - DBMS Solved by John

_	# 21 of 30 (Start time: 01:40:20 AM, 09 July 2020)
The rela	tionship between department to employees is
Colort th	a correct action
	e correct option Many to many
0	
	One to one
0	One to one
	One to many Grand Quiz
	Cs403 - DBMS
•	Solved by John
	Many to one
0	

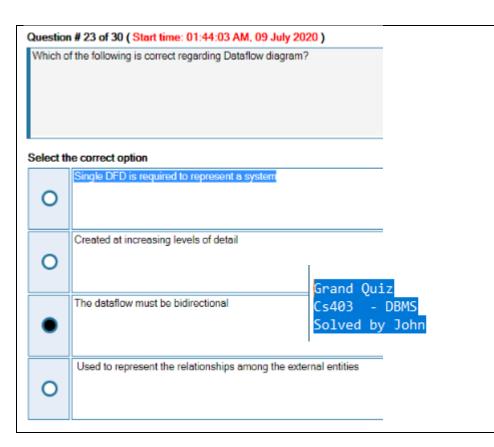


p.44

Logical data independence

Logical data independence provides the independe changes in conceptual model do not affect the esimply it can be stated at the Immunity of exchanges at conceptual level.

Although we have data independence at different should be careful before making a change to any because not all changes are accepted transpare levels. There may be some changes which may



Note sure

p.56

Data Flow Diagrams:

The most common tool used for deigning database sysused to design systems graphically and expresses different levels.

DFDs show the flow of data between different processes DFDs are simple, and hide complexities.

DFDs are Descriptive and links between processes descri

		n # 24 of 30 (Start time: 01:45:52 AM, 09 July 2020) enrolled in a relationship are called		 Entities enrolled in a relationship are called its <i>participants</i>. The participation of an entity in a relationship is <i>total</i> when all entities of that set it
;	Select th	ne correct option		be participant in the relationship otherwise it is <i>partial</i> e.g. if every <i>Part</i> is supplied <i>Supplier</i> then the SUPP PART relationship is total. If certain parts are available wi
	0	Roles	-	a supplier than it is partial.
	•	Participants Grand Quiz Cs403 - DBMS Solved by John		
	0	Instances		
	0	Symbols		

Question # 25 of 30 (Start time: 01:46:47 AM, 09 July 2020) In join, only selected rows of a relation are made cross product with second relation.			157
Soloat th	e correct option		
Select u	Normal	-	
0			Theta Join: In theta join we apply the condition on input relation(s) and then only those select
	Theta Grand Quiz Cs403 - DBMS Solved by John		rows are used in the cross product to be merged and included in the output. It mea that in normal cross product all the rows of one relation are mapped/merged with the rows of second relation, but here only selected rows of a relation are made croproduct with second relation. It is denoted as under: - R X O S
0	Outer		
	Semi		

Question	n # 26 of 30 (Start time: 01:47:43 AM, 09 July 2020)		
Which o	of the following constraints enforces entity integrity?		
			Not sure .
			Confirm it.
Select th	ne correct option		
0	PRIMARY KEY	-	Correct as per past papers.
	FOREIGN KEY	=	
0			
	CHECK		
0	Grand Quiz		
	NOT NULL Cs403 - DBMS Solved by John		

	n # 27 of 30 (Start time: 01:50:04 AM, 09 July 2020)		
By default, a non-key attribute in a relation can have value.			
Select th	ne correct option		Not sure
0	Binary	-	
0	Null		
0	Character Grand Quiz		
	Integer Cs403 - DBMS Solved by John	=	

_	on # 28 of 30 (Start time: 01:52:01 AM, 09 July 2020)	
vvnich	feature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss?	p.47
Select	the correct option	
0	User accessible catalog	 Recovery Services Recovery services mean that in case a database gets an inco
0	Data processing Grand Quiz	state to get corrupted due to any invalid action of someon DBMS should be able to recover itself to a consistent state, of that the data loss during the recovery process of the d
	Recovery service Cs403 - DBMS Solved by John	remains minimum.
0	Authorization service	

_			
C	uestion	a # 28 of 30 (Start time: 01:52:01 AM, 09 July 2020)	P.47
		eature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss?	 Recovery Services Recovery services mean that in case a database gets an inconsistent state to get corrupted due to any invalid action of someone, the DBMS should be able to recover itself to a consistent state, ensuring that the data loss during the recovery process of the database
	O	User accessible catalog	remains minimum.
	0	Data processing Grand Quiz	
		Recovery service Cs403 - DBMS Solved by John	
	0	Authorization service	

_	n # 29 of 30 (Start time: 01:53:49 AM, 09 July 2020) anding data dictionary is created by		p.65
Select th	he correct option		, p.05
0	DFD		Free Standing Second type of data dictionary is free standing data dictionary create by any CASE to
0	Grand Quiz Cs403 - DBMS		and then attached to the database management systems. A number of case tools a available for this purpose and help user designing the database and the database applications as well in some modern forms of the CASE tools.
	CASE tools Solved by John	_	
0	Cross Reference Matrix	•	

Question	n # 30 of 30 (Start time: 01:55:53 AM, 09 July 2020)		
Α	A is used to combine rows from two or more tables, based on a related column between them.		
			Not sure
Select th	ne correct option		
0	Select operator		
0	Project operator Grand Quiz		
	Join operation Cs403 - DBMS Solved by John		
0	Delete operator		