The market for IT professionals is still increasing and will continue to do so in the future, as the world gets ever more dependent on computer systems. True or False?

- True (*)
- False

Consider your school library. It will have a database with transaction details of which student borrows which books. Is a record of one student borrowing one book Data or Information?

- Data (*)
- Information
- Both
- Neither

Information which was gained from data is the same as: (Choose Two)

- Knowledge (*)
- Raw Materials
- Intelligence (*)
- There is no difference between data and information.

The first step in system development is to document the requirements. Why?

- Wrong. A blueprint for the database design is not needed. We can just start coding straight away.
- It clarifies what a business wants to accomplish, and provides measures for deciding if the system delivers all that is required. (*)
- It allows application development to be conducted without having to consider database design.
- It keeps businesses honest.

Which of the following are types of databases?

- Hierarchical (*)
- Relational (*)
- SQL
- Network (*)

Databases perform these functions....

- Running multiple applications on multiple client-servers
- Providing integrated software on fast processing servers
- Providing software running on a variety of platforms and configurations allowing companies a structured way to access and manage their data (*)
- They run purely as client-based software on personal computers

In a physical data model, a relationship is represented as a?

Column

- Row
- Instance
- Foreign Key (*)

Which of the following statements about relationships are true? (Choose Two)

- They become Foreign Keys in the database. (*)
- They Must be Mandatory to be created in the database.
- They can be either mandatory or optional. (*)
- They must exist between two different Entities.

Which of the following entities most likely contains valid attributes? (Choose two)

- Entity: Home. Attributes: Number of Bedrooms, Owner, Address, Date Built (*)
- Entity: Pet. Attributes: Name, Birthdate, Owner (*)
- Entity: Car. Attributes: Owner Occupation, Owner Salary, Speed
- Entity: Mother. Attributes: Name, Birthdate, Occupation, Salary

All of the following would be instances of the entity ANIMAL SPECIES except which?

- Dog
- Bird
- Elephant
- Leaf (*)

.An entity can have many Unique Identifiers. True or False?

- True (*)
- False

The entity/relationship model is created before the physical database design model. True or False?

- True (*)
- False

All of the following are examples of ENTITY: Instance except two. Select the answers that are ENTITY: Instance. (Choose Two)

- TRANSPORTATION METHOD: Car (*)
- ANIMAL: Dog (*)
- MEAT PRODUCT: Lettuce
- BODY PART: Larry Ellison

One Relationship can be both mandatory and optional at different ends. True or False?

- True (*)
- False

Which of the following are valid relationship degrees? (Choose two)

- 1:1 (*)
- 1:M(*)
- 1:0
- 0:0

All the Attributes in a system are just written on the ERD, and they all go in the Top Left Hand Corner of the paper. True or False?

- True
- False (*)

Entity names are always singular. True or False?

- True (*)
- False

Matrix Diagrams are mandatory when doing data modelling. True or False?

- True
- False (*)

Which of the following is true about subtypes?

- One instance may belong to two subtypes of the same supertype.
- Subtypes must be mutually exclusive. (*)
- Subtypes must not be mutually exclusive.
- Subtype entities may not have relationships to the other subtype entities, only the supertype itself.

A Supertype can have only one subtype. True or False?

- True
- False (*)

A supertype can only have two subtypes and no more. True or False?

- True
- False (*)

You can only create relationships to a Supertype, not to a Subtype. True or False?

- True
- False (*)

When creating entities you must follow these rules: (Choose Two)

- Name them in Plural
- Name them in Singular (*)
- Exclude Attributes
- Include Attributes (*)

How would you model a business rule that states that girls and boys may not attend classes together?

- Use a supertype
- Use two subtypes with relationships from class to student gender (*)
- Make the attribute Gender mandatory
- You cannot model this. You need to document it.

Can all constraints be modeled on an ER diagram?

- No, in which case you should let the database administrator handle them
- No, but you just explain them to the users so they can enforce them
- Yes, all constraints must be modeled and shown on the ER diagram
- No, so you should list them on a separate document to be handled programmatically (*)

"Only teachers may supervise exams" is an example of which of the following?

- A procedural business rule (*)
- An attribute that should be stored on the PERSON entity
- A structural business rule
- An attribute that is not be inherited from the PERSON supertype and is unique to the TEACHER subtype

Why is it important to identify and document structural rules?

- Ensures we know what data to store and how that data works together. (*)
- Ensures nothing. There is no benefits to be gained from documenting your Structural Business Rules. We need to concentrate on the Procedural Business Rules only.
- Ensures we know what Information to store and how that Information works together.
- All of the Above.

If a relationship can NOT be moved between instances of the entities it connects, it is said to be:

- Mandatory
- Optional
- Transferrable
- Non-Transferable (*)

Many to many relationships must be left in the Model. It is important to have them documented as M-M. True or False?

- True
- False (*)

What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE"

- One to Many Optional
- One to Many Mandatory

- One to One Optional (*)
- Many to Many Mandatory

Relationships can be Redundant. True or False?

- True (*)
- False

A relationship from an entity back to itself is called a _____ relationship.

- Mandatory
- Recursive (*)
- Many to Many Optional
- Transferrable

All entities must be given a new artificial UID. True or False?

- True
- False (*)

When data is stored in one place in a database, the database conforms to the rules of ______.

- Normality
- Reduction
- Normalization (*)
- Multiplication

Would it be a good idea to model age as an attribute of STUDENT

- Yes
- Maybe it could stop us having to calculate someones age every time we need it
- Sometimes
- No it breaks the Normalization rules (*)

Arcs are Mandatory in Data modelling. All ERD's must have at least one Arc. True or False?

- True
- False (*)

Arcs are used to visually represent _____ between two or more relationships in an ERD.

- Sameness
- Differencies
- Exclusivity (*)
- An Arc is what Noah sailed on with all the animals.

An arc can be modelled as Supertype and Subtypes. True or False?

- True (*)
- False

No parts of a UID are mandatory. True or False?

- True
- False (*)

Consider the entity ADDRESS with the attributes:

ADDRESS:

House Number

- * Street
- * Town
- * City
- * Year of Build

o City Population

This entity is NOT in 3rd Normal Form ("no non-UID attribute can be dependent on another non-UID attribute). True or False?

- True (*)
- False

A relationship can be both Recursive and Hierarchal at the same time. True or False?

- True
- False (*)

If Audit trail attributes are added to an entity they must be in the entities they are auditing. True or False?

- True (*)
- False

Communication Skills, Team-working and Presentations skills are all important for Consultants. True or False?

- True (*)
- False

Which of the following are NOT valid techniques for effective public speaking? (Choose Two)

- Whispering (*)
- Using specialist language and technical abbreviations when communicating technical information (*)
- Being enthusiastic
- All of the Above

When you add the concept of time to your data model, your model becomes more complex. True or False?

- True (*)
- False

Which of the following would be a logical constraint when modeling time for a City entity?

- People are born in the city and people die in the city.
- Cites may change their name and/or which country they are placed in, if the borders of a country change. (*)
- If you are doing a system for any French City, you would need security clearance
- You need a constant record of cities because they are still cities, even if leadership changes over time, e.g. they get a new Mayor

What do users of a system without the concept of time loose?

- Journalling becomes much easier.
- Journalling becomes slightly harder.
- The ability to track data over time. (*)
- Nothing is lost if a system does not track time.

If a system includes the concept of time, and it stores Start Dates, then End Dates becomes Mandatory. For each Start Date attribute you create, you MUST create an End Date attribute and it must be mandatory. True or False?

- True
- False (*)

Why would you want to model a time component when designing a system that lets people buy shares via the Internet? (Choose Two)

- This would only be required in the US to allow the New York Stock Exchange to be notified of this information.
- To allow the sales people to determine when the shared were bought and therefore at what price. (*)
- You would not want to model this, it is not important.
- The price of shares fluctuates and for determining price, you need to know the time of purchase (*)

All systems must include functionality to provide logging or journaling in conceptual data models. True or False?

- True
- False (*)

The main subject areas taught by the Oracle Academy are:

• Computer Repairs

- Database performance tuning.
- Data Modeling, SQL and PL/SQL (*)
- Systems programming and computer architecture

Consider your school library. It will have a database with transaction details of which student borrows which books. Is details of the total number of books out on loan in one given month Data or Information?

- Data
- Information (*)
- Both
- Neither

Information which was gained from data is the same as: (Choose Two)

- Knowledge (*)
- Raw Materials
- Intelligence (*)
- There is no difference between data and information.

Databases are used in most countries and by most governments. Life, as we know it, would change drastically if we no longer had access to databases. True or False?

- True (*)
- False

Incorrect. Refer to Section 1.

Section 1 Lesson 4

(Answer all questions in this section)

5. Which of the following are types of databases? Mark for Review

(1) Points

(Choose all cor	rect answers)
	Hierarchical (*)
	Relational (*)
	SQL
	Network (*)
	Correct
6. Databases perf	Form these functions Mark for Review
	Running multiple applications on multiple client-servers
	Providing integrated software on fast processing servers
configurations allowing companies a st	Providing software running on a variety of platforms and tructured way to access and manage their data (*)
computers	They run purely as client-based software on personal

	Correct		
	n 2 Less	on 2 uestions in this section)	
(All3W	er an qu	restions in this section)	
Review	7.	In a physical data model, a relationship is represented as a?	Mark for
(1) Points			
		Column	
		Row	
		Instance	
		Foreign Key (*)	
		Correct	
	8.	An entity is instantiated as a? Mark for Review	
(1) Points			
		experience	

Correct

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two)	10. Mark for Revie	Which of the following entities most likely contains valid attributes? (Choose
(1) Poi	nts	
		(Choose all correct answers)
۵ ما ما <u></u>	D-+- D.: + (*)	Entity: Home. Attributes: Number of Bedrooms, Owner,
Addres	ss, Date Built (*)	
		Entity: Dat Attributor: Nama Birthdata Owner (*)
		Entity: Pet. Attributes: Name, Birthdate, Owner (*)
		Entity: Car. Attributes: Owner Occupation, Owner Salary,
Speed		Entity: Car. Attributes: Owner Gecapation, Owner Saidi y,
Calana		Entity: Mother. Attributes: Name, Birthdate, Occupation,
Salary		
ew you		Iback, and question scores below. An asterisk (*) indicates a correct answer.
	Section 2 Lesso	
	(Answer all qu	estions in this section)
	11.	All of the following would be instances of the entity ANIMAL SPECIES except
which?	? Mark for Revie	
(1) Poi	nts	
		Dog
		Bird
		Elephant

		Leaf (*)
		Correct
Two)	Mark for Reviev	Which of the following statements about relationships are true? (Choose v
		(Choose all correct answers)
		They become Foreign Keys in the database. (*)
		They Must be Mandatory to be created in the database.
		They can be either mandatory or optional. (*)
		They must exist between two different Entities.
		Correct
(1) Poin		Primary Unique Identifiers (Choose Two) Mark for Review

	(Choose all correct answers)	
entities have a Primary	Are Required. The data model is not complete until all / UID. (*)	
	Distinguish each instance of an entity from all others (*)	
	Are not required	
an entity	You may create more than one Primary Unique Identifier	for
	Correct	
Section 3 Lesso	on 1	
	estions in this section)	
14. for Review (1) Points	Which of the following are valid relationship degrees? (Choose two) M	∕lark
	(Choose all correct answers)	
	1:1 (*)	

16. The many end of a Relationship is called: Mark for Review

(1) Points					
			Gulls Foot		
			Pigs Ear		
			Crows Ear		
			Crows Foot (*))	
				Correct	
(1) Points	17.	The single end	of a Relationsh	ip is called:	Mark for Review
			Single Toe (*)		
			Big Toe		
			Single Foot		
			Crows Foot		

Incorrect. Refer to Section 3.

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Which of the following is true about subtypes? Mark for Review

21.

(1) Points

for Review

supertype.		0	ne instance may belong to two subtypes of the same	
		Su	btypes must be mutually exclusive. (*)	
		Sı	ubtypes must not be mutually exclusive.	
subtype entit	ies, only	Suthe supertype itself	obtype entities may not have relationships to the other	
			Correct	
for Review	22.	A supertype can c	nly have two subtypes and no more. True or False? M	⁄lark
(1) Points				
		Tr	ue	
		Fa	lse (*)	
			Correct	
	23.	All ER diagrams m	ust have one of each of the following: (Choose two) N	⁄lark

Section 4 Lesson 2

24.

(1) Points

handle them

(Answer all questions in this section)

Correct

Can all constraints be modeled on an ER diagram? Mark for Review

No, in which case you should let the database administrator

enforce them	No, but you just explain them to the users so they can
diagram	Yes, all constraints must be modeled and shown on the ER
handled programmatically (*)	No, so you should list them on a separate document to be
	Correct
25. "Only teachers following? Mark for Review (1) Points	may supervise exams" is an example of which of the
	A procedural business rule (*)
	An attribute that should be stored on the PERSON entity
	A structural business rule
supertype and is unique to the TEACHE	An attribute that is not be inherited from the PERSON
	Correct

26. A business rule such as "We only ship goods after customers have completely paid any outstanding balances on their account" is best enforced by: Mark for Review
(1) Points
Making the payment attribute null.
Making the payment attribute optional.
We need to trust our customers, and we know they will pay some day.
Hiring a programmer to create additional programming code to verify no goods are shipped until the account has been settled in full. (*)
Correct
 27. How would you model a business rule that states that girls and boys may not attend classes together? Mark for Review (1) Points
Use a supertype
Use two subtypes with relationships from class to student gender (*)
Make the attribute Gender mandatory

You cannot model this. You need to document it.
Correct
Section 5 Lesson 1
(Answer all questions in this section)
28. If a relationship can NOT be moved between instances of the entities it connects, it is said to be: Mark for Review (1) Points
Mandatory
Optional
Transferrable
Non-Transferable (*)
Correct

Section	n 5 Lesson 2
(Answ	er all questions in this section)
relationship? (1) Points	29. Which of the following pairs of entities is most likely to be modeled as a M:M Mark for Review
	CAR and WHEEL
	TREE and BRANCH
	PERSON and FINGERPRINT
	TEACHER and SUBJECT AREA (*)
	Incorrect. Refer to Section 5.
relationship. (1) Points	30. A relationship from an entity back to itself is called a Mark for Review
	Mandatory
	Recursive (*)

Many to Many Optional
Transferrable
Correct Test: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer. Section 5 Lesson 2
(Answer all questions in this section)
31. How do you include a relationship as part of the UID for an entity? Mark for Review (1) Points
By barring the relationship in question (*)
By reporting it in an external document
By including the UID from the parent entity as an attribute in the entity
You cannot model that.

Correct
32. Relationships can be Redundant. True or False? Mark for Review (1) Points
True (*)
False
Correct
Section 6 Lesson 1
(Answer all questions in this section)
33. A unique identifier must be made up of more than one attribute. True or False? Mark for Review
(1) Points
True
False (*)

(Answer all questions in this section)
--

for Review	35.	Any Non-UID n	nust be dependant on the entire UID. True or False? M	lark
(1) Points				
			True (*)	
			True (*)	
			False	
			Correct	
	n 7 Lesso			
(Answ	er all que	estions in this se	ction)	
	36.	Primary UIDs a	re: Mark for Review	
(1) Points				
			Something that each Entity should have, but is not	
mandatory (*)				
			Useful as an alternative means identifying instances of an	ı
entity, independent of their datatype				
			Mandatory in data modeling	

Always comprised of numbers
Incorrect. Refer to Section 7
37. All relationships participating in an arc must be mandatory. True or False? Mark for Review (1) Points
True
False (*)
Incorrect. Refer to Section 7
38. Arcs are Mandatory in Data modelling. All ERD's must have at least one Arc. True or False? Mark for Review
(1) Points

True

False (*)

Correct	
39. An arc can be modelled as Supertype and Subtypes. True or False? Mar for Review (1) Points	' k
True (*)	
False	
Correct	
Correct	
40. Arcs are used to visually represent between two or more relationships in an ERD. Mark for Review (1) Points	
Sameness	
Differencies	
Exclusivity (*)	
An Arc is what Noah sailed on with all the animals. Test: Mid Term Exam - Database Design	

Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 7 Lesson 2
(Answer all questions in this section)
41. A recursive relationship must Mandatory at both ends. True or False? Mark for Review (1) Points
True
False (*)
Correct
Section 7 Lesson 3
(Answer all questions in this section)
42. Modeling historical data can produce a unique identifier that always excludes dates. True or False? Mark for Review (1) Points
True

(Answer all questions in this section)

44. Your apperance at a presentation is important. You need to look smart and presentable. True or False? Mark for Review
(1) Points
True (*)
False
Correct
Section 10 Lesson 1
(Answer all questions in this section)
45. All systems must have an entity called WEEK with a holiday attribute, so you know when to give your employees a holiday. True or False? Mark for Review
(1) Points
True
False (*)
Correct

(1) Points

	46.	Modeling historical data is Op	tional. True or False?	Mark for Review
(1) Points				
		True (*)		
		False		
			Correct	
			Correct	
more complex	47. x. True o	When you add the concept of r False? Mark for Review	time to your data mode	l, your model becomes
(1) Points				
		True (*)		
		False		
			Correct	
Dates become	48. es Mand	If a system includes the conce atory. For each Start Date attrib		
attribute and	it must k	pe mandatory. True or False?	Mark for Review	

need to know the time of purchase (*)	The price of shares fluctuates and for determining price, you
	Correct
_	a data model for a computer sales company, where the price f the week goods are shipped. So shipping is more expensive if
the customer wants a delivery to take pmodel this? Mark for Review	place on a Saturday or Sunday. What would be the best way to
(1) Points	
days, and ensure the we also have an a	Use a Delivery Day entity, which holds prices against week ttribute for the Requested Delivery Day in the Order Entity. (*)
change.	Email current price to all employees whenever the prices
when they change and pin them on the	Update the prices in the system, print out the current prices company noticeboard
	Allow them to enter whatever delivery charge they want.
	Correct
Skip navigation elements to page conte	
Test: Mid Term Exam - Database Design	
Review your answers, feedback, and quanswer.	uestion scores below. An asterisk (*) indicates a correct
Section 1 Lesson 1	

ı	(Answer all	l auestions	in thic	section)
١	Aliswei ali	luuestions	111 11115	Section

Information? Mark for Review

 Once you have learned how to write programs and build systems, you no longer need any input or involvement from any users, as you are perfectly capable of delivering the systems the business needs and wants. Mark for Review
(1) Points
True. All that perfect systems need are correct programs.
False. Business requirements can and will change. For instance new legal requirements may arise. $(*)$
True. All users do is delay systems delivery with their forever changing minds and new requirements.
True. Users never know what they want anyway, so building systems are best left to the professionals.
Section 1 Lesson 2
(Answer all questions in this section)
2. Consider your school library. It will have a database with transaction details of which student borrows which books. Is a record of one student borrowing one book Data or

(1) Points	
Da	ata (*)
In	formation
Во	oth
No	either
Correct	Correct
given mor	3. Consider your school library. It will have a database with transaction details student borrows which books. Is details of the total number of books out on loan in one on the or Information? Mark for Review
(1) Points	
Da	ata

design.	It allows application development to be conducted without having to consider database
	It keeps businesses honest.
Correct	Correct
	Section 1 Lesson 4 (Answer all questions in this section)
their da	5. Businesses involved in any of the following typically use databases to handle ta: Finance, Logistics, Commerce, Procurement and Distribution? True or False? Mark ew
(1) Point	ts
	True (*)
	False

Section 2 Lesson 2

Correct	Correct
(Choose two) (1) Points	6. Oracle Database Software provides which of the following functionality? Mark for Review
	(Choose all correct answers)
Graphio	cal User Interface (*)
Interne	t Browser
Server	(*)
Operat	ing Systems
Incorrect	Incorrect. Refer to Section 1.

(Answer all questions in this section)

one. Select the	7. All of the following could be attributes of an ENTITY called PERSON except incorrect one: Mark for Review
(1) Points	
Haircol	or
NA/a: -lea	
Weight	
Gender	
Natach	a Hansen (*)
Correct	Correct
Review	8. An entity can have many Unique Identifiers. True or False? Mark for
(1) Points	

10. All of the following would be instances of the entity ANIMAL SPECIES except which? Mark for Review

(1) Points

	ERD (*)
	Process
	Table
	Attribute
Correct	Correct
two) (1) Poin	12. Which of the following entities most likely contains valid attributes? (Choose Mark for Review
	(Choose all correct answers)
	Entity: Home. Attributes: Number of Bedrooms, Owner, Address, Date Built (*)
	Entity: Pet. Attributes: Name, Birthdate, Owner (*)

Mark fo	r Revie	w	
(1) Points			
		True	
		False (*)	
Correct	Correct		
Section	21000	n J	
(Answe	r all que	estions in this section)	
	16.	The many end of a Relationship is called:	Mark for Review
(1) Points			
Gulls Fo	oot		
Pigs Ear	-		
Crows E	ar		
Crows F	oot (*)		

Section 3 Lesson 3	
(Answer all questions in this section)	
18. Matrix Diagrams are mandatory when doing data modelling. True or False Mark for Review	€.
(1) Points	
True	
False (*)	
Correct Correct	
Section 4 Lesson 1	
(Answer all questions in this section)	
19. You can only create relationships to a Supertype, not to a Subtype. True of False? Mark for Review	r
(1) Points	
True	

True or False?	21. All instances of the supertype must be an instance of one of the subtypes. Mark for Review
(1) Points	
True (*)
False	
Correct	Correct
for Review	22. A supertype can only have two subtypes and no more. True or False? Mark
(1) Points	
True	
False (*)

Correct		Correct	
for Revie		23.	Which of the following are suitable Entity names? (Choose Two) Mark
` ,			(Choose all correct answers)
ı	DOGS		
,	ANIMA	L (*)	
	ANIMA	LS	
l	DOG (*)	
Correct		Correct	
:	Section	4 Lesso	n 2

(Answer all questions in this section)
--

paid any outsta (1) Points	24. A business rule such as "We only ship goods after customers have completely nding balances on their account" is best enforced by: Mark for Review
Making	the payment attribute null.
Making	the payment attribute optional.
We nee	ed to trust our customers, and we know they will pay some day.
	programmer to create additional programming code to verify no goods are shipped nt has been settled in full. (*)
Correct	Correct
following? (1) Points	25. "Only teachers may supervise exams" is an example of which of the Mark for Review

A procedural business rule (*)
An attribute that should be stored on the PERSON entity
A structural business rule
An attribute that is not be inherited from the PERSON supertype and is unique to the TEACHER subtype
Correct Correct
26. How would you model a business rule that states that girls and boys may no attend classes together? Mark for Review (1) Points
Use a supertype
Use two subtypes with relationships from class to student gender (*)

	Make the attribute Gender mandatory
	You cannot model this. You need to document it.
Correct	Correct
Review (1) Poin	
	Ensures we know what data to store and how that data works together. (*)
Busines	Ensures nothing. There is no benefits to be gained from documenting your Structural ss Rules. We need to concentrate on the Procedural Business Rules only.
	Ensures we know what Information to store and how that Information works together.
	All of the Above.

Incorre	ct Incorrect. Refer to Section 4
	Section 5 Lesson 1
	(Answer all questions in this section)
False?	28. Transferable relationships can only be mandatory, not optional. True or Mark for Review
(1) Poir	nts
(-,	
	True
	False (*)
Correct	Correct
	Section 5 Lesson 2
	(Answer all questions in this section)

relationship?	29. Which of the following pairs of entities is most likely to be modeled as a M:M Mark for Review
(1) Points	
CAR ar	nd WHEEL
TREE a	and BRANCH
PERSO	N and FINGERPRINT
TEACH	IER and SUBJECT AREA (*)
Incorrect	Incorrect. Refer to Section 5.
be either	30. If two entities have two relationships between them, these relationships can or? Mark for Review
(1) Points	
Redun	dant or Required (*)

Replicated or Required
Resourced and Really Good
Redundant and Replicated
Correct Correct
Previous Page 3 of 5 Next Summary
Section 5 Lesson 2
(Answer all questions in this section)
31. Relationships can be Redundant. True or False? Mark for Review(1) Points
(1) i oilles
True (*)
False

Correct C	Correct
	Many to many relationships must be left in the Model. It is important to have ed as M-M. True or False? Mark for Review
(1) Points	
True	
False (*)	
Correct C	Correct
Section 6	5 Lesson 1
	all questions in this section)
Secondary UID a	33. The first UID for an entity is called the Primary UID, the second is called nd so on. Mark for Review

	Yes, this is the way UID's are named. (*)
	No, it is not possible to have more than one UID for an Entity.
	Yes, but then it stops. No entities can have more than two UID's.
	No, each Entity can only have one UID, the secondary one.
Correct	Correct
	Section 6 Lesson 2 (Answer all questions in this section)
False?	34. An entity without repeated values is said to be on 1st Normal Form. True or Mark for Review
	True (*)

False (*)
Correct Correct
39. Arcs are used to visually represent between two or more relationships in an ERD. Mark for Review
(1) Points
Sameness
Differencies
Exclusivity (*)
An Arc is what Noah sailed on with all the animals.
Correct Correct

(1) Points	40.	Which of the	following is N	IOT a relations	hip type?	Mark for Review
Sc	ome to Non	e (*)				
Oi	ne to One					
Oı	ne to Many	,				
Many to Many						
Correct	Corre	ect				
Previous	Page	4 of 5 Next	Summary			
	ection 7 Les Answer all q	son 2 uestions in this	section)			

	1.	A recursive relationship must Mandatory at both ends. True or False? Mark
for Review		
(1) Points		
True		
True		
False (*)		
Incorrect		Incorrect. Refer to Section 7
moorrede		medited. Neich to Seedon /
Section 7	Lesso	on 3
(Answer	all que	estions in this section)
4	2.	Modeling historical data can produce a unique identifier that always excludes
dates. True or Fal		Mark for Review
(1) Points		
Truo		
True		
False (*)		

Correct	Correct
Sect	tion 8 Lesson 1
	swer all questions in this section)
	43. Consultants often use their experience in ensuring projects stay on track and
delivers with (1) Points	hin the timescales set out for the project. True or False? Mark for Review
True	2 (*)
False	e
Correct	Correct
Sect	ion 8 Lesson 2
(Ans	swer all questions in this section)

44. Your apperance at a presentation is important. You need to look smart and presentable. True or False? Mark for Review
(1) Points
True (*)
False
Correct Correct
Section 10 Lesson 1
(Answer all questions in this section)
45. If a system includes the concept of time, and it stores Start Dates, then End Dates becomes Mandatory. For each Start Date attribute you create, you MUST create an End Date attribute and it must be mandatory. True or False? Mark for Review
(1) Points
True

	47.	There is only one way to model time in a Data Model. True or False?	Mark
for Review			
(1) Points			
True	!		
False	o (*\		
False	= (')		
Correct	Correc	ct	
	48.	All systems must have an entity called WEEK with a holiday attribute,	so you
	to give yo	our employees a holiday. True or False? Mark for Review	
(1) Points			
True	!		
False	e (*)		

Correct	Correct
	Section 10 Lesson 2
	(Answer all questions in this section)
consido	49. Which of the following is a logical constraint, that could result from ering how time impacts data storage? Mark for Review
(1)1011	11.3
Date of	An ASSIGNMENT may only refer to an EMPLOYEE with a valid employee record at the Start the ASSIGNMENT. (*)
	EMPLOYEE periods can overlap causing the database to crash.
	End Date must be before the Start Date.
	Dates must be stored with Time.
Correct	Correct

50. Why would you want to model a time component when designing a system that lets people buy shares via the Internet? (Choose Two) Mark for Review
(1) Points
(Choose all correct answers)
This would only be required in the US to allow the New York Stock Exchange to be notified of this information.
To allow the sales people to determine when the shared were bought and therefore at what price. (*)
You would not want to model this, it is not important.
The price of shares fluctuates and for determining price, you need to know the time of purchase (*)
Correct Correct
11. Primary Unique Identifiers (Choose Two) Mark for Review(1) Points

(Choose all correct answers)
Are Required. The data model is not complete until all entities have a Primary UID. (*)
Distinguish each instance of an entity from all others (*)
Are not required
You may create more than one Primary Unique Identifier for an entity
Correct Correct
12. All of the following could be attributes of an ENTITY called PERSON except one. Select the incorrect one: Mark for Review(1) Points
Haircolor
Weight

Gende	r
Natach	na Hansen (*)
Correct	Correct
you are doing (1) Points	13. Volatile entities have special requirements and need special attention when data modelling. True or False? Mark for Review
True //	
True (*	
False	
Correct	Correct

Section 3 Lesson 1
(Answer all questions in this section)
14.
Relationship Names are optional. True or False?
Mark for Review
(1) Points
True
False (*)
Correct Correct
15. Relationships represents something of significance to the business? True o False? Mark for Review
(1) Points
True (*)
False

Correct	Correct
Sectio	n 3 Lesson 2
(Answ	er all questions in this section)
symbol goes i	16. To identify an attribute as part of a unique identifier on an ER diagram, the # n front of it. True or False? Mark for Review
(1) Points	
()	
True (*)
False	
Correct	Correct
	17. Entity names are always singular. True or False? Mark for Review
	17. Entity names are always singular. True or False? Mark for Review
(1) Points	
True (*)
,	

S	Section 4 Lesson 1			
(.	(Answer all questions in this section)			
True or F	alse?	19. Mark fo	All instances of the supertype must be an instance of one of the subtype or Review	S.
(1) Points	S			
.	-ruo (*	1		
ı	rue (*)		
F	alse			
Correct		Correct		
for Revie	·w	20.	Which of the following are suitable Entity names? (Choose Two)	∕lark
(1) Points	S			
			(Choose all correct answers)	
С	oogs			

ANIMAL (*)
ANIMALS
DOG (*)
Test: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 4 Lesson 1
(Answer all questions in this section)
21. A Supertype can have only one subtype. True or False? Mark for Review
True
False (*)
Correct Correct

	22. You can only create relationships to a Supertype, not to a Subtype. True or
False? Mark f	or Review
(1) Points	
_	
True	
False (*)
Correct	Correct
	23. A supertype can only have two subtypes and no more. True or False? Mark
for Review	
(1) Points	
Truo	
True	
False (*)
Correct	Correct

Business Ru Review	25. Iles as part	A new system would have a mixture of both Procedural and Stof the documentation of that new system. True or False?	tructural Mark for
(1) Points			
Tru	e (*)		
Fals	e		
Incorrect		Incorrect. Refer to Section 4	
(1) Points	26.	Can all constraints be modeled on an ER diagram? Mark	for Review
No,	in which ca	ase you should let the database administrator handle them	
No,	but you jus	st explain them to the users so they can enforce them	
Yes	, all constra	ints must be modeled and shown on the ER diagram	

Section	Section 5 Lesson 2		
(Answe	(Answer all questions in this section)		
for Review (1) Points	29. How do you include a relationship as part of the UID for an entity? Mark		
By barr	ing the relationship in question (*)		
Ву герс	orting it in an external document		
By inclu	uding the UID from the parent entity as an attribute in the entity		
You car	nnot model that.		
Correct	Correct		
relationship? (1) Points	30. Which of the following pairs of entities is most likely to be modeled as a M:M Mark for Review		

Correct		Correct
relation	iship.	32. A relationship from an entity back to itself is called a Mark for Review
(1) Poin		
(1) 1 0111	11.5	
	Mandat	tory
	Recursi	ve (*)
	Many to	o Many Optional
	Transfe	rrable
Correct		Correct
	Section	6 Lesson 1
	(Answe	r all questions in this section)

33.
All entities must be given a new artificial UID. True or False?
Mark for Review
(1) Points
True
False (*)
Correct Correct
Section 6 Lesson 2
(Answer all questions in this section)
34. Normalizing an Entity to 1st Normal Form is done by removing repeated or redundant attributes. True or False? Mark for Review
(1) Points
True (*)
False

Correct	: Cor	rect	
	Section 6 Le	esson 3	
	(Answer all	questions in this section)	
	35.	When is an entity in 2nd Normal Form?	Mark for Review
(1) Poir	nts		
	When all no	on-UID attributes are dependent upon the entire UII	D. (*)
	When no at	tritibutes are mutually independant and fully indep	endent on the primary key.
key.	When no at	tritibutes are mutually independent and all are fully	dependent on the primary
	None of the	e Above.	
Correct	: Cor	rect	

S	Section 7 Lesson 1
((Answer all questions in this section)
ا (1) Point	36. All relationships participating in an arc must be mandatory. True or False? Mark for Review
7	True
F	False (*)
Correct	Correct
relations	37. Arcs are used to visually represent between two or more ships in an ERD. Mark for Review
S	Sameness

Correct

Correct

		39.	Which of the following	s is NOT a relationship type?	Mark for Review
(1) Poin	ts				
	Some t	to None	(*)		
	One to	One			
	One to	Many			
	Many t	to Many			
Correct		Correct	i.		
		40.	Primary UIDs are:	Mark for Review	
(1) Poin	ts				
	Somot	hing tha	t each Entity should hav	re, but is not mandatory (*)	
	Joinet	iiiig tiid	cach Entity should hav	c, but is not manuatory ()	

Useful as an alternative means identifying instances of an entity, independent of their datatype
Mandatory in data modeling
Always comprised of numbers
Test: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 7 Lesson 2
(Answer all questions in this section)
41. A recursive relationship must Mandatory at both ends. True or False? Mar for Review
(1) Points
True
False (*)
Correct Correct

Section 7 Lesson 3		
(Answer all questions in this section)		
42. Modeling historical data can produce a unique identifier that always excludes dates. True or False? Mark for Review		
1) Points		
True		
F-1 (*)		
False (*)		
Correct Correct		
Section 8 Lesson 1		
(Answer all questions in this section)		
43. Database Design projects must use Consultants or they will fail. True or false? Mark for Review		
1) Points		

(1) Points	46. Modeling historical data is Optional. True or False? Mark for Review	
True (ʾ		
False		
Correct	Correct	
more complex (1) Points	47. When you add the concept of time to your data model, your model becomes True or False? Mark for Review	;
True ('		
False		

Correct	Correct
	48. All systems must have an entity called WEEK with a holiday attribute, so you
know when to	give your employees a holiday. True or False? Mark for Review
(1) Points	
True	
Truc	
False (*)
Correct	Correct
Section	n 10 Lesson 2
	er all questions in this section)
(711344	er an questions in this section)
conceptual da	49. All systems must include functionality to provide logging or journaling in ta models. True or False? Mark for Review
(1) Points	
,	
_	
True	

	41.	A recursive relationship must Mandatory at both ends. True or False?	Mark
for Review			
(1) Points			
True			
	als X		
False (*)		
Correct	Correc	t	
Sectio	n 7 Lesso	nn 3	
(Answ	er all qu	estions in this section)	
dates. True or	42. False?	Modeling historical data can produce a unique identifier that always ex Mark for Review	cludes
	ruise.	Mark for heview	
(1) Points			
True			

Section 8 Lesson 2

(Answer all questions in this section)
 44. Which of the following are NOT valid techniques for effective public speaking? (Choose Two) Mark for Review (1) Points
(Choose all correct answers)
Whispering (*)
Using specialist language and technical abbreviations when communicating technical information (*)
Being enthusiastic
All of the Above
Correct Correct
Section 10 Lesson 1

(Answer all questions in	this section)
--------------------------	---------------

	45. If a system includes the concept of time, and it stores Start Dates, then End Mandatory. For each Start Date attribute you create, you MUST create an End Date must be mandatory. True or False? Mark for Review
(1) 1 011113	
True	
False (*	·)
·	
Correct	Correct
	46. Modeling historical data is Optional. True or False? Mark for Review
(1) Points	
True (*	
False	

Correct	Correct
	47. When you add the concept of time to your data model, your model becomes .True or False? Mark for Review
(1) Points	
True (*)
False	
Correct	Correct
know when to	48. All systems must have an entity called WEEK with a holiday attribute, so you give your employees a holiday. True or False? Mark for Review
(1) Points	
True	
False (*)

Correct (Correct
Section :	10 Lesson 2
(Answer	all questions in this section)
	49. All systems must include functionality to provide logging or journaling in models. True or False? Mark for Review
True	
False (*)	
Correct	Correct
	50. Which of the following is a logical constraint, that could result from time impacts data storage? Mark for Review

An ASSIGNMENT may only refer to an EMPLOYEE with a valid employee record at the Start Date of the ASSIGNMENT. (*)
EMPLOYEE periods can overlap causing the database to crash.
End Date must be before the Start Date.
Dates must be stored with Tim
Test: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 1 Lesson 1
(Answer all questions in this section)
 The market for IT professionals is still increasing and will continue to do so in the future, as the world gets ever more dependent on computer systems. True or False? Mark for Review
(1) Points
True (*)
False

Incorrect		Incorrect. Refer to Section 1.				
Review (1) Points	3.	What is the difference between "information" and "data"?	Mark for			
Da	ata is held and	d understood only by Users				
Int	formation is I	held and understood only by users				
Int	formation an	nd data have no differences - they are two words for the same	thing			
Da users (*)	ata turns into	information when it is stored in a database and accessed by s	ystems and			
Correct	Correct					
Se	ction 1 Lesso	on 3				

(Answer all questions in this section)	
--	--

4. Databases are used in most countries and by most governments. Life, as we know it, would change drastically if we no longer had access to databases. True or False? Mark for Review
(1) Points
True (*)
False
Correct Correct
Section 1 Lesson 4
(Answer all questions in this section)
5. Databases perform these functions Mark for Review
(1) Points
Running multiple applications on multiple client-servers

	8.	A/an	is a picture of all the information that will form the basis for
the finished sy	rstem.	Mark for Review	
(1) Points			
ERD (*	·)		
Proces	ss		
	-		
Table			
A + + : l	.4		
Attribu	ite		
Correct	Correct		
	3011300		
	9.		ng are examples of ENTITY: Instance except two. Select the
answers that a	are ENTIT	Y: Instance. (Choo	ose Two) Mark for Review
(1) Points			
		(Choose all corre	ect answers)
		, 0000 0 00110	

TRANSPORTATION METHOD: Car (*)
ANIMAL: Dog (*)
MEAT PRODUCT: Lettuce
BODY PART: Larry Ellison
Correct Correct
10. An entity can have many Unique Identifiers. True or False? Mark for Review(1) Points
True (*)
False

incorre	ect inc	orrect. Refer to Section	1 75kip navigation (elements to page col	ntents
Test: M	Aid Term Exam - Data	abase Design			
Review answer	-	oack, and question sco	res below. An aste	risk (*) indicates a co	orrect
	Section 1 Lesson 1				
	(Answer all questio	ns in this section)			
_	need any input or in	ce you have learned ho volvement from any us and wants. Mark for F	sers, as you are per	•	
(1) Poir	nts				
	True. All that perfe	ct systems need are co	rrect programs.		
arise. (ʾ	•	uirements can and will	change. For instan	ce new legal require	ments may
require	True. All users do is ements.	delay systems deliver	/ with their foreve	r changing minds an	d new
profess	True. Users never k sionals.	now what they want a	nyway, so building	; systems are best le	ft to the

Section 1 Lesson 2				
(Answer all questions in this section)				
2. Consider your school library. It will have a database with transaction details of which student borrows which books. Is a record of one student borrowing one book Data or Information? Mark for Review				
(1) Points				
Data (*)				
Information				
Both				
Neither				
Correct Correct				
3. Consider your school library. It will have a database with transaction details of which student borrows which books. Is details of the total number of books out on loan in one given month Data or Information? Mark for Review				
(1) Points				

	Data
	Information (*)
	Both
	Neither
Correc	ct Correct
	Section 1 Lesson 3 (Answer all questions in this section)
	4. The first step in system development is to document the requirements. Why? Mark for Review
(1) Poi	ints

away.	Wrong. A blueprint for the database design is not needed. We can just start coding straight
system	It clarifies what a business wants to accomplish, and provides measures for deciding if the delivers all that is required. (*)
design.	It allows application development to be conducted without having to consider database
	It keeps businesses honest.
Correct	t Correct
	Section 1 Lesson 4
	(Answer all questions in this section)
their da	5. Businesses involved in any of the following typically use databases to handle ata: Finance, Logistics, Commerce, Procurement and Distribution? True or False? Mark riew
(1) Poir	nts

Operating Systems

	8.	An entity can have many Unique Identifiers. True or False?	Mark for
Review			
(1) Points			
True	(*)		
False			
Correct	Correc	t	
	0	Deletionakin nemona nemonalki wenke Tura en Feles 2 - Mank f	: D:
	9.	Relationship names are usually verbs. True or False? Mark f	or Review
(1) Points			
True	(*)		
Falsa			
False			

Correct	Correct
which? Mark fo	10. All of the following would be instances of the entity ANIMAL SPECIES except or Review
	. The view
(1) Points	
Dog	
208	
Bird	
Elephai	nt
Leaf (*)	
()	
Correct	Correct
Page 1 of 5	Next Summary
Section 2 Lesso	on 2

(Answer all o	questions in this sec	tion)
11. the finished system.		_ is a picture of all the information that will form the basis for
(1) Points		
ERD (*)		
_		
Process		
Table		
Attribute		
Correct Corre	ect	
12.	Which of the fol	lowing entities most likely contains valid attributes? (Choose
two) Mark for Rev		towning entities most likely contains valid detributes. (enouse
(1) Points		
	(Choose all corre	ect answers)

They Must be Mandatory to be created in the database.
They can be either mandatory or optional. (*)
They must exist between two different Entities.
Incorrect Incorrect. Refer to Section 2
Section 3 Lesson 1 (Answer all questions in this section)
14.
Relationship Degree/Cardinality is important. True or False?
Mark for Review
(1) Points
True (*)
False

Correct	Correc	t	
	15.		
Relationsh	nip Names ai	re optional. True or False?	
М	ark for Revie	ew	
(1) Points			
		True	
		False (*)	
Correct	Correc	τ	
Se	ection 3 Lesso	on 2	
(A	nswer all qu	estions in this section)	
	16.	The many end of a Relationship is called:	Mark for Review
(1) Points			
Gl	ulls Foot		

Crows Foot

Incorre	ect Incorrect. Refer to Section 3.
	Section 3 Lesson 3
	(Answer all questions in this section)
	18. Matrix Diagrams are mandatory when doing data modelling. True or False? Mark for Review
(1) Poi	nts
	True
	False (*)
Correc	t Correct
	Section 4 Lesson 1
	(Answer all questions in this section)

False?	Mark fo	19. or Reviev	You can only create relationships to a Supertype, not to a Subtype. True or
(1) Poir	nts		
	True		
	False (*	')	
	·	•	
Correct		Correct	
		20.	A Supertype can have only one subtype. True or False? Mark for Review
(1) Poir	nts		
` '			
	True		
	False (*	')	
	Tuise (,	
Correct		Correct	
Correct		Correct	

Previous	Page 2 of 5 Next Summary
Section 4 Lesso (Answe	on 1 er all questions in this section)
True or False? (1) Points	21. All instances of the supertype must be an instance of one of the subtypes. Mark for Review
True (*	·)
False	
Correct	Correct
for Review (1) Points	22. A supertype can only have two subtypes and no more. True or False? Mar
True	

24. A business rule such as "We only ship goods after customers have completely paid any outstanding balances on their account" is best enforced by: Mark for Review

(1) Points

Making the payment attribute null.

Making the payment attribute optional.

We need to trust our customers, and we know they will pay some day.

Hiring a programmer to create additional programming code to verify no goods are shipped until the account has been settled in full. (*)

Correct Correct

following?	25. "Only teachers may supervise exams" is an example of which of the Mark for Review
(1) Points	
A proc	edural business rule (*)
An attr	ribute that should be stored on the PERSON entity
A struc	ctural business rule
An attr TEACHER subty	ribute that is not be inherited from the PERSON supertype and is unique to the ype
Correct	Correct
attend classes (1) Points	26. How would you model a business rule that states that girls and boys may not together? Mark for Review

	Ensures we know what Information to store and how that Information works together.
	All of the Above.
Incorre	ct Incorrect. Refer to Section 4
	Section 5 Lesson 1 (Answer all questions in this section)
	(Answer an questions in this section)
False?	28. Transferable relationships can only be mandatory, not optional. True or Mark for Review
(1) Poin	nts
	True
	False (*)
Correct	Correct

30. If two entities have two relationships between them, these relationships can

be either ______ or _____ ? Mark for Review

(1) Points
Redundant or Required (*)
Replicated or Required
Resourced and Really Good
Redundant and Replicated
Correct Correct
Previous Page 3 of 5 Next Summary
Section 5 Lesson 2
(Answer all questions in this section)
31. Relationships can be Redundant. True or False? Mark for Review (1) Points

(Answer all questio	ns in this section)
---------------------	---------------------

Seconda (1) Point	33. The first UID for an entity is called the Primary UID, the second is called try UID and so on. Mark for Review
١	Yes, this is the way UID's are named. (*)
1	No, it is not possible to have more than one UID for an Entity.
١	Yes, but then it stops. No entities can have more than two UID's.
1	No, each Entity can only have one UID, the secondary one.
Correct	Correct
	Section 6 Lesson 2 (Answer all questions in this section)

Falso	Nank f	34. or Revie	An entity without repeated values is said to be on 1st Normal Form. True or
		or Revie	w
(1) Poir	nts		
	True (*	*)	
	False		
	raise		
Correct	t	Correct	t
	Section	n 6 Lesso	on 3
	(Answ	er all que	estions in this section)
	(7111344	er an que	estions in this section,
for Rev	riew	35.	Would it be a good idea to model age as an attribute of STUDENT Mark
(1) Poir			
(1)1011	103		
	Yes		
	Maybe	e it could	stop us having to calculate someones age every time we need it

Sometimes
No - it breaks the Normalization rules (*)
Incorrect Incorrect. Refer to Section 6
Section 7 Lesson 1
(Answer all questions in this section)
36. Consider the entity ADDRESS with the attributes:
ADDRESS:
House Number
* Street
* Town
* City
* Year of Build
o City Population
This entity is NOT in 3rd Normal Form ("no non-UID attribute can be dependent on another non-Ul attribute). True or False?

Mark	for Revie	w	
(1) Points			
True (*)		
False			
ruisc			
Correct	Correct	t	
for Review	37.	An arc can be modelled as Supertype and Subtypes. True or False?	Mark
(1) Points			
. ,			
True (*\		
True (. 1		
False			
raise			
Incorrect		Incorrect. Refer to Section 7	

	:	38.	No parts of a UID are mandatory. True or False?	Mark for Review
(1) Point	:S			
-	True			
I	False (*))		
Correct	1	Correct		
		39.	Arcs are used to visually represent bet	ween two or more
relations	ships in			
(1) Point	:S			
g	Samene	SS		
	D:((
	Differen	cies		
I	Exclusiv	ity (*)		

An	Arc is what	: Noah sailed on with all the animals.	
Correct	Correc	ct	
(1) Points	40.	Which of the following is NOT a relationship type?	Mark for Reviev
Son	ne to None	e (*)	
One	e to One		
One	e to Many		
Ma	ny to Many	,	
Correct	Correc	ct	

Previous	Page 4	of 5	Next	Summary
Sectio	n 7 Lesso	n 2		
(Answ	er all que	estions i	n this se	ection)
for Review	41.	A recur	sive rela	ationship must Mandatory at both ends. True or False? Mark
(1) Points				
(1) Points				
True				
False ((*)			
Incorrect		Incorre	ect. Refe	er to Section 7
Sectio	n 7 Lesso	n 3		
(Answ	er all que	estions i	n this se	ction)
	42.			orical data can produce a unique identifier that always excludes
dates. True or	ralse?	Mark fo	or Revie	vW
(1) Points				

Correc	t Correct
	Section 8 Lesson 2
	(Answer all questions in this section)
presen	44. Your apperance at a presentation is important. You need to look smart and stable. True or False? Mark for Review
(1) Poii	nts
	True (*)
	False
Correc	t Correct
	Section 10 Lesson 1
	(Answer all questions in this section)

45. If a system includes the concept of time, and it stores Start Dates, then End Dates becomes Mandatory. For each Start Date attribute you create, you MUST create an End Date attribute and it must be mandatory. True or False? Mark for Review

(1) Points	
True	
True	
False	· (*)
Incorrect	Incorrect. Refer to Section 10
a City entity?	46. Which of the following would be a logical constraint when modeling time for Mark for Review
(1) Points	
Peop	ole are born in the city and people die in the city.
Cites country chan	may change their name and/or which country they are placed in, if the borders of a age. (*)
If you	u are doing a system for any French City, you would need security clearance

	eed a constant record of cities because they are still cities, even if leadership changes they get a new Mayor
Correct	Correct
for Review (1) Points	47. There is only one way to model time in a Data Model. True or False? Mark
True	
False (*)
Correct	Correct
(1) Points	48. All systems must have an entity called WEEK with a holiday attribute, so you give your employees a holiday. True or False? Mark for Review
True	

Correct	Correct	
Previous	Page 5 of 5	Summary
1. The main su		ht by the Oracle Academy are: Mark for Review
(1) Points		
Computer R	epairs	
Database pe	erformance tunin	g.
Data Model	ing, SQL and PL/S	QL(*)
Systems pro	gramming and co	omputer architecture
Correct		
Section 1 Less	son 2 uestions in this se	ection)
2. Consider y	our school librar	y. It will have a database with transaction details of which student

borrows which books. Is details of the total number of books out on loan in one given month Data or

Information? Mark for Review

(1) Points
Data
Information (*)
Both
Neither
Correct
3. What is the difference between "information" and "data"? Mark for Review(1) Points
Data is held and understood only by Users
Information is held and understood only by users
Information and data have no differences - they are two words for the same thing
Data turns into information when it is stored in a database and accessed by systems and users (*
Correct

Section 1 Lesson 3
(Answer all questions in this section)
4. Users with detailed business knowledge can provide input to the Database Development Process True or False? Mark for Review
(1) Points
True (*)
- 1
False
Correct
Section 1 Lesson 4
(Answer all questions in this section)
5. Software cannot operate without Hardware. True or False? Mark for Review
(1) Points
T (*)
True (*)

Row
Instance
Foreign Key (*)
Incorrect. Refer to Section 2
8. Relationship names are usually verbs. True or False? Mark for Review
(1) Points
True (*)
11. All of the following would be instances of the entity ANIMAL SPECIES except which? Mark for Review
(1) Points
Dog
Bird
Elephant
Leaf (*)

Correct
12. Which of the following entities most likely contains valid attributes? (Choose two) Mark for Review(1) Points
(Choose all correct answers)
Entity: Home. Attributes: Number of Bedrooms, Owner, Address, Date Built (*)
Entity: Pet. Attributes: Name, Birthdate, Owner (*)
Entity: Car. Attributes: Owner Occupation, Owner Salary, Speed
Entity: Mother. Attributes: Name, Birthdate, Occupation, Salary
Correct
13. A/an is a picture of all the information that will form the basis for the finished system. Mark for Review
(1) Points
ERD (*)
Process

17. Entity names are always singular. True or False? Mark for Review
(1) Points
True (*)
False
Correct
Section 3 Lesson 3
(Answer all questions in this section)
18. Two entities can ONLY have one relationship between them. True or False? Mark for Review
(1) Points
True
F-1 /#\
False (*)
Correct

Section 4 Lesson 1
(Answer all questions in this section)
19. Which of the following are suitable Entity names? (Choose Two) Mark for Review
(1) Points
(Choose all correct answers)
DOGS
ANIMAL (*)
ANIMALS
DOG (*)
Correct
20. All instances of a subtypes may be an instance of the supertype but does not have to. True or False? Mark for Review
(1) Points
True

False (*)
Section 4 Lesson 1
(Answer all questions in this section)
21. The "Other" subtype is mandatory. True or False? Mark for Review
(1) Points
True
False (*)
Correct
22. All instances of the supertype must be an instance of one of the subtypes. True or False? Mark for Review
(1) Points
True (*)
False
Correct

23. You can only create relationships to a Supertype, not to a Subtype. True or False? Mark for Review
(1) Points
True
False (*)
Correct
Section 4 Lesson 2
(Answer all questions in this section)
24. A business rule such as "We only ship goods after customers have completely paid any outstanding balances on their account" is best enforced by: Mark for Review
(1) Points
Making the payment attribute null.
Making the payment attribute optional.
We need to trust our customers, and we know they will pay some day.
Hiring a programmer to create additional programming code to verify no goods are shipped until the account has been settled in full. (*)

Correct
25. A new system would have a mixture of both Procedural and Structural Business Rules as part of the documentation of that new system. True or False? Mark for Review(1) Points
(2) 1 56
True (*)
False
Correct
26. Can all constraints be modeled on an ER diagram? Mark for Review (1) Points
No, in which case you should let the database administrator handle them
No, but you just explain them to the users so they can enforce them
Yes, all constraints must be modeled and shown on the ER diagram
No, so you should list them on a separate document to be handled programmatically (*)

True (*)
False
Correct
Section 5 Lesson 2
(Answer all questions in this section)
29. Many to many relationships must be left in the Model. It is important to have them documented as M-M. True or False? Mark for Review
(1) Points
True
False (*)
Correct
30. How do you include a relationship as part of the UID for an entity? Mark for Review
(1) Points

Review

(1) Points
Mandatory
Recursive (*)
Many to Many Optional
Transferrable
Correct
Section 6 Lesson 1
(Answer all questions in this section)
33. People are not born with "numbers," but a lot of systems assign student numbers, customer IDs, etc. A shoe has a color, a size, a style, but may not have a descriptive "number". So, to be able to uniquely and efficiently identify one instance of the entity SHOE, a/an UID can be created. Mark for Review
(1) Points
artificial (*)
unrealistic

Section 6 Lesson 3

(Answer all questions in this section)
35. Any Non-UID must be dependant on the entire UID. True or False? Mark for Review
(1) Points
True (*)
False
Correct
Section 7 Lesson 1
(Answer all questions in this section)
36. No parts of a UID are mandatory. True or False? Mark for Review
(1) Points
True
False (*)
Correct

Incorrect. Refer to Section 7

39. Arcs are used to visually represent betv Mark for Review	veen two or more relationships in an ERD.
(1) Points	
Sameness	
Differencies	
Exclusivity (*)	
An Arc is what Noah sailed on with all the animals.	
Correct	
40. All relationships participating in an arc must be ma (1) Points	ndatory. True or False? Mark for Review
True	
False (*)	
41. Which of the following would be good as a Unique Io	dentifier for its Entity? (Choose Three) Mark
(1) Points	

(Choose all correct answers)
Personal Identification number for Person (*)
Vehicle Registration Number for Car (*)
ISBN Number for Book (*)
Date of birth for Baby
Incorrect. Refer to Section 7
Section 7 Lesson 3
(Answer all questions in this section)
42. If Audit trail attributes are added to an entity they must be in the entities they are auditing True or False? Mark for Review
(1) Points
True (*)
False

(1) Points

(Choose all correct answers)
Whispering (*)
Using specialist language and technical abbreviations when communicating technical information $(*)$
Being enthusiastic
All of the Above
Correct
Section 10 Lesson 1
(Answer all questions in this section)
45. Which of the following would be a logical constraint when modeling time for a City entity? Mark for Review
(1) Points
People are born in the city and people die in the city.
Cites may change their name and/or which country they are placed in, if the borders of a country change. (*)

If you are doing a system for any French City, you would need security clearance
You need a constant record of cities because they are still cities, even if leadership changes over time, e.g. they get a new Mayor
Correct
46. There is only one way to model time in a Data Model. True or False? Mark for Review
(1) Points
True
True
False (*)
Correct
47. Modeling historical data is Optional. True or False? Mark for Review
(1) Points
True (*)
False

This would only be required in the US to allow the New York Stock Exchange to be notified of this information.

(Choose all correct answers)

To allow the sales people to determine when the shared were bought and therefore at what price $(*)$
You would not want to model this, it is not important.
The price of shares fluctuates and for determining price, you need to know the time of purchase (*)
Correct
50. Which of the following is a logical constraint, that could result from considering how time impacts data storage? Mark for Review (1) Points
An ASSIGNMENT may only refer to an EMPLOYEE with a valid employee record at the Start Date of the ASSIGNMENT. (*)
EMPLOYEE periods can overlap causing the database to crash.
End Date must be before the Start Date.
Dates must be stored with Time.
Correct

instance
table (*)

Section 1 Lesson 1

1. Why is it important to identify the business requirements before beginning to program a new system?

- It is not important to have a blueprint for database design and programs. You should just start coding as soon as possible, so you can meet your deadlines.
- It clarifies what a business wants to accomplish, so you can get your database design and coding started correctly. (*)
- It allows application development to be conducted without having to consider database design.
- It keeps businesses honest.
- 2. What are the major content areas covered in the Oracle Academy?
 - Database programming and Computer repair.
 - Database configuration and performance tuning.
 - Data Modeling, SQL Java, and PL/SQL (*)
 - Data Modeling, Java, and C+
- 3. There is a big increase in demand for Information Technology professionals in today's market. True or False?
 - True (*)
 - False

Section 1 Lesson 2

- 1. How do you turn "data" into "information"
 - By testing it
 - By querying it or accessing it (*)
 - By storing it on a server
 - By storing it in a database

2. Consider an example where an Oracle database works "behind the scenes" for common internet activity. Which of the following best describes a database transaction?

- A person searches an airline website to find all available fares for a flight. (*)
- A business identifies what process it uses for purchasing inventory.
- A student places a link to their homepage from the school's website.
- A person looking in the newspaper for good internet sites.
- 3. Which of the following are examples of data vs. Information
 - A.Student age vs. average age of all students in class
 - B. Bank deposit amount vs. total account balance
 - C. Winning time for a race vs. length of race
 - D. Price of computer vs. total sales of all computers for a company
 - E. Both A and B. (*)
 - F. B, C, and D
- 4. What are the results of having all your data in one central location? (Choose two)

(Choose all correct answers)

- Improved Performance (*)
- Easier access to data (*)
- Updates are harder to execute
- Decreased performance

Section 1 Lesson 3

- 1. Which of the following is the correct order for the Database Development Process?
 - Strategy, Analysis, Design, Build (*)
 - Analysis, Strategy, Design, Build
 - Build, Strategy, Analysis, Design
 - Design, Build, Strategy, Analysis
- 2. Data Modeling is the last stage in the development of a database. True or False?
 - True
 - False (*)
- 3. Oracle was one of the first relational database systems available commercially? True or False?
 - True (*)
 - False

- 1. Databases function more efficiently as....
 - multiple applications on multiple client-servers
 - integrated software on fast processing servers (*)
 - client-based software of client servers
 - client-based software on personal computers
- 2. Users would use which of the following software to access essential business applications? (Choose three)

(Choose all correct answers)

- GUI Interface (*)
- Internet Browser (*)
- Server
- Operating System (*)
- 3. Which of the following is NOT a type of database?
 - Hierarchical
 - Relational
 - SQL (*)
 - Network
- 4. Personal computers (PCs) have been in existence since 1950. True or False?
 - True
 - False (*)

Section 2 Lesson 1

- 1. Which of the following are reasons we create conceptual models?
 - A.It facilitates discussion. A picture is worth a thousand words.
 - B. It forms important hardware system documentation.
 - C. It develops business development methodology
 - D. It forms a sound basis for physical database design
 - B and C
 - A and D (*)
- 2.Examples of hardware are:
 - Data entry web pages, Mouse Hard disk.
 - Mouse, Hard disk, Monitor (*)
 - Monitor, Mouse, Printer, Printed Reports
 - Monitor, Mouse, Mouse Pad, Cables and Wires, Hard disk

3.Examples of software are:

- Data entry web pages, Spreadsheets, Google and Yahoo search Engines, SQL Developer,
 Oracle Application Express (*)
- Microsoft Word, Microsoft Powerpoint, Microsoft Excel, Mouse pad
- Mouse, Cables, Microsoft Word, Microsoft Powerpoint
- Monitor, Microsoft Word, Microsoft PowerPoint, SQL Developer

Section 2 Lesson 2	
1.A/an	is a piece of information that in some way describes an entity. It is a property of
the entity and it qu	antifies, qualifies, classifies or specifies the entity.

- ERD
- Process
- Table
- Attribute (*)

2.In a physical data model, an attribute is represented as a/an

- Column (*)
- Row
- Instance
- Foreign Key

3. Which of the following entities most likely contains invalid attributes?

- Entity: Home. Attributes: Number of Bedrooms, Owner, Address, Date Built
- Entity: Pet. Attributes: Name, Birthdate, Owner
- Entity: Car. Attributes: Owner Occupation, Owner Salary, Speed (*)
- Entity: Mother. Attributes: Name, Birthdate, Hair Colour, Eye Colour

4.An entity may have which of the following?

- experiences
- instances (*)
- tables
- none of the above

5. Unique Identifiers....

- distinguish one entity from another
- distinguish one instance of an entity from all other instances of that entity (*)
- distinguish all entities in a database
- distinguishes nothing

6.The word "Volatile" means....

- Changing constantly; unstable (*)
- Static; unlikely to change
- Large quantity
- Limited quantity

7.All of the following would be instances of the entity PERSON except which?

- David Jones
- Male (*)
- Angelina Rosalie
- Grace Abinajam

8. What is the purpose of a Unique Identifier?

- To uniquely determine a table and columns within that table.
- To identify a specific row within a table, using one or more columns and/or foreign keys.
- Create an entity that is unlike any other entity aside from itself.
- To identify one unique instance of an entity, by using one or more attributes and/or relationships. (*)

9. Entities are usually verbs. True or False?

- True
- False (*)

10. Which of the following statements about attributes are true? (Choose Two)

(Choose all correct answers)

- They describe, qualify, quantify, classify, or specify an entity. (*)
- They are often adjectives.
- They have a data type such as a number or character string. (*)
- They must be single valued unless they belong to more than one entity.

11.In the following statements, find two examples of ENTITY: Instance. (Choose Two)

(Choose all correct answers)

- DAIRY PRODUCT: yogurt (*)
- VEGETABLE: grows
- BOOK: Biography of Mahatma Gandhi (*)
- BODY PART: Marilyn Manson

12. Some of the following could be attributes of an ENTITY called PERSON. Select the incorrect attributes for PERSON. (Choose Two)

(Choose all correct answers)

Age

- Freddy Wilson (*)
- Name
- Priya Hansenna (*)

Section 2 Lesson 3

1. Entity Relationship model is independent of the hardware or software used for implementation. True or False?

- True (*)
- False

2. The purpose of an ERD is to document the proposed system and facilitate discussion and understanding of the requirements captured by the developer. True or False?

- True (*)
- False

3.A well structured ERD will show only some parts of the finished data model. You should never try to model the entire system in one diagram, no matter how small the diagram might be. True or False?

- True
- False (*)
- 4. Which of the following statements are true about ERD's? (Choose Two)

(Choose all correct answers)

- A piece of information can be shown multiple times on an ERD.
- A piece of information should only be found one place on an ERD. (*)
- You should not model derivable data. (*)
- All data must be represented on the ERD, including derived summaries and the result of calculations.

5.In the grid computing model, resources are pooled together for efficiency. True or False?

- True (*)
- False

Section 3 Lesson 1

1. What are three properties that every relationship should have?

- Transferability, degree, name
- Name, optionality, degree (*)
- A UID bar, a diamond, an arc

- Name, optionality, arcs
- 2. Relationships can be either mandatory or optional. True or False?
 - True (*)
 - False
- 3. Relationships always exist between
 - 3 or more entities
 - 2 entities (or one entity twice) (*)
 - 2 attributes
 - 3 or more attributes

4.In a business that sells computers, choose the best relationship name from CUSTOMER to ITEM (computer, in this case).

- Each CUSTOMER must be the buyer of one or more ITEMS. (*)
- Each CUSTOMER must be the seller of one or more ITEMS.
- Each CUSTOMER may be the maker of one or more ITEMS.
- Each CUSTOMER may be the producer of one or more ITEMS.

Section 3 Lesson 2

- 1. Consider the recommended drawing conventions for ERD's. Indicate which of the following accurately describes diagramming conventions for entities and attributes:
 - The * means that an attribute is optional and entity names should be plural verbs.
 - The 'o' means that the attribute is optional and entity names should be plural verbs.
 - The * means that an attribute is mandatory or required and the entity name should be singular. (*)
 - The 'o' means that the attribute is mandatory or required and the entity name should be a singular noun.
- 2. Which symbol is used to indicate that a particular attribute is optional?
 - *
 - o (*)
 - #
 - &
- 3.On an ER diagram which symbol identifies an attribute as part of a unique identifier.
 - #(*)
 - *
 - 0
 - X

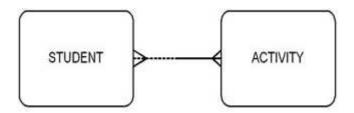
- 4. Entity names are always plural. True or False?
 - True
 - False (*)
- 5. Entity boxes are drawn as:
 - Soft Boxes (*)
 - Hard Boxes
 - Bold Circles
 - Normal Circles

6. Attributes are written inside the entity box to which they belong. True or False?

- True (*)
- False

Section 3 Lesson 3

- 1.Two entities can have one or more relationships between them. True or False?
 - True (*)
 - False
- 2. After looking at the diagram, choose the sentence below that could be "read" from the existing relationship (even though you're missing relationship labels!)



- Each Student must have one or more Activities.
- Each Activity may be performed by one or more Students.
- Each Student may participate in one or more Activities. (*)
- Each Activity must belong to one and only one Student.
- 3. When reading a relationship between 2 entities, the relationship is only read from left to right. True or False?
 - True
 - False (*)

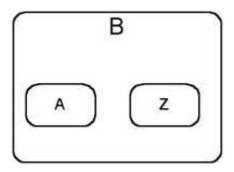
Section 3 Lesson 4

1.A Matrix Diagram will help you with all of the following except:

- Defining Relationships Between Entities
- Identifying Entities
- Defining Instances of Entities (*)
- Naming Relationships
- 2. Creating a Matrix Diagram is mandatory when doing Data Modeling. True or False?
 - True
 - False (*)
- 3. Matrix Diagrams helps verify you have identified all possible and required relationships between your existing entities. True or False?
 - True (*)
 - False

Section 4 Lesson 1

- 1.A subtype can have a relationship not shared by the supertype. True or False?
 - True (*)
 - False
- 2. Which of the following is the best scenario for using supertype/subtype entities:
 - A pet store that sells small animals, because they each need different size cages and food.
 - An ice cream store that sells ice cream in sugar cones and regular cones.
 - A grocery store that gives customers a choice of plastic or paper bags.
 - A vehicle dealership that sells cars, trucks, and boats on trailers. (*)
- 3. All instances of the subtypes must be an instance of the supertype. True or False?
 - True (*)
 - False
- 4. All instances of the supertype are also instances of one of the subtypes. True or False?
 - True (*)
 - False
- 5. A supertype should have at least two subtypes. True or False?
 - True (*)
 - False
- 6. Which of the following is a TRUE statement about the diagram below?



- Every Z is either an A or a B
- Every B is a Z
- Every A is a Z
- Every A is a B (*)

7. Which of the following is true about supertypes and subtypes?

- Instances that belong to two subtypes of the same supertype may be modeled as a one-to-one relationship between the two subtypes.
- Subtypes inherit the relationships and attributes of the supertype. (*)
- Subtypes may have no more than 2 levels of nesting.
- Supertype and subtype entities must be mutually exclusive.

8.The "Other" subtype is best used:

- For instances that belong to the supertype and at least one other subtype.
- For a subtype that does not have any of the same attributes as the supertype to which it belongs.
- As an extra subtype to ensure that all instances of subtypes are mutually exclusive and complete. By having an "Other" subtype, all instances of the Supertype will be of one subtype type. (*)
- You should never have a subtype called Other.

9. When creating entities it is important to remember all of the following: (Choose Two)

(Choose all correct answers)

- Create a formal description. (*)
- Include attributes. (*)
- Do not use synonyms.
- Do use reserved words.

10. Which of the following are valid formats for an attribute? (Choose Two)

(Choose all correct answers)

- Character string. (*)
- Decimal.
- Number. (*)

• HEX.

Section 4 Lesson 2

- 1. How should you handle constraints that cannot be modeled on an ER diagram?
 - Always let the network architect handle them
 - List them on a separate document to be handled programmatically (*)
 - Explain them to the users so they can enforce them
 - All constraints must be modeled and shown on the ER diagram
- 2. How would you model a business rule that states that on a student's birthday, they do not have to attend their classes?
 - Use a supertype
 - Use a subtype
 - Make the attribute Birthdate mandatory
 - You cannot model this. You need to document it (*)
- 3. Which of the following is an example of a structural business rule?
 - All employees must belong to at least one department. (*)
 - Buildings to be purchased by the business must be current with earthquake building code.
 - All overdue payments will have an added 10 % late fee.
 - All products will have a selling price no less than 30 % greater than wholesale.
- 4."Only managers can approve travel requests" is an example of which of the following?
 - A structural business rule.
 - A mandatory business rule.
 - A procedural business rule. (*)
 - An optional business rule.
- 5.A business rule such as "All accounts must be paid in full within 10 days of billing" is best enforced by:
 - Making the payment attribute mandatory.
 - Making the relationship between CUSTOMER and PAYMENT fully mandatory and 1:1 on both sides.
 - Creating a message to be printed on every bill that reminds the customer to pay within ten days.
 - Hiring a programmer to create additional programming code to identify and report accounts past due. (*)
- 6. Business rules are important to data modelers because:
 - A. They capture all of the needs, processes, and required functionality of the business. (*)

- B. They are easily implemented in the ERD diagram.
- C. The data modeler must focus on structural rules, because they are easily represented diagrammatically, and eliminate other rules that involve extra procedures or programming.
- D. Both A and C are true

7. Why is it important to identify and document business rules?

- It allows you to create your data model, then check for accuracy. (*)
- It allows you to improve the client's business.
- It ensures that the data model will automate manual processes.
- None of the above.

Section 5 Lesson 1

1. If a relationship can be moved between instances of the entities it connects, it is said to be:

- Implicit
- Transferrable (*)
- Committed
- Recursive

2. A non-transferable relationship is represented by which of the following symbols?

- Heart
- Diamond (*)
- Circle
- Triangle

3. Non-transferable relationships can only be mandatory, not optional. True or False?

- True (*)
- False

Section 5 Lesson 2

1. When resolving an M:M relationship, the new relationships will always be _____ on the many side.

- optional
- recursive
- mandatory (*)
- redundant

2. What uncommon relationship is described by the statements: "Each LINE must consist of many POINTS and each POINT must be a part of many LINES"

- One to Many Optional
- One to Many Mandatory
- Many to Many Optional
- Many to Many Mandatory (*)

3. When are relationships redundant?

- When you can derive the relationship from other relationships in the model (*)
- When they have the same visual structure but different meaning
- When the information does not relate to the model
- When the relationships connect 2 entities and they each have distinct meanings
- 4. Many to many relationships between entities usually hide what?
 - Another relationship
 - Another entity (*)
 - More attributes
 - Uniqueness

5. If the same relationship is represented twice in an Entity Relationship Model, it is said to be:

- Replicated
- Removable
- Redundant (*)
- Resourceful

6. Which of the following are relationship types? (Choose Two)

(Choose all correct answers)

- One to Some
- Many to Many (*)
- One to Many (*)
- One to Another

7. Which of the following pairs of entities is most likely to be modeled as a M:M relationship? (Choose Two)

(Choose all correct answers)

- STUDENT and CLASS (*)
- TREE and SEEDLING
- EMPLOYEE and MANAGER
- CAR and DRIVER (*)

Section 5 Lesson 3

- 1.If an intersection entity is formed that contains no attributes of its own, its uniqueness may be modeled by
 - Creating new attributes.
 - Barring the relationships to the original entities. (*)
 - Placing the UID attributes from the original entities into the intersection entity.
 - None of the above.
- 2. Many-to-Many relationships are perfectly acceptable in a finished ERD. There is not need to do any more work on them. True or False?
 - True
 - False (*)
- 3. When you resolve a M-M by creating an intersection entity, this new entity will always inherit:
 - The attributes of both related entities.
 - A relationship to each entity from the original M-M. (*)
 - The UID's from the entities in the original M-M.
 - Nothing is inherited from the original entities and relationship.

Section 6 Lesson 1

- 1.A unique identifier can only be made up of one attribute. True or False?
 - True
 - False (*)
- 2.People are not born with "numbers," but a lot of systems assign student numbers, customer IDs, etc. A shoe has a color, a size, a style, but may not have a descriptive "number". So, to be able to uniquely and efficiently identify one instance of the entity SHOE, a/an ______ UID can be created.
 - artificial (*)
 - unrealistic
 - structured
 - identification
- 3. An entity can only have one UID. True or False?
 - True
 - False (*)
- 4.A UID can be made up from the following: (Choose Two)

(Choose all correct answers)

- Attributes (*)
- Entities
- Relationships (*)
- Synonyms

Section 6 Lesson 2

1. When data is stored in more than one place in a database, the database violates the rules of

- Normalization (*)
- Replication
- Normalcy
- Decency
- 2. When all attributes are single-valued, the database model is said to conform to:
 - 1st Normal Form (*)
 - 2nd Normal Form
 - 3rd Normal Form
 - 4th Normal Form

3. The following entity is on 1st normal form: True or False?

ENTITY: VEHICLE

ATTRIBUTES:

REGISTRATION

MAKE

MODEL

COLOUR

DRIVER

PASSENGER 1

PASSENGER 2

PASSENGER 3

- True
- False (*)
- 4. An entity can have repeated values and still be in 1st Normal Form. True or False?
 - True
 - False (*)

Section 6 Lesson 3

- 1. What is the rule of Second Normal Form?
 - All non-UID attributes must be dependent upon the entire UID (*)
 - Some non-UID attributes can be dependent on the entire UID
 - No non-UID attributes can be dependent on any part of the UID
 - None of the Above
- 2. Examine the following entity and decide which attribute breaks the 2nd Normal Form rule:

ENTITY: CLASS

ATTRIBUTES:

 CLASS ID

 DURATION

 SUBJECT

 TEACHER NAME AND ADDRESS

- CLASS ID
- DURATION
- SUBJECT
- TEACHER NAME AND ADDRESS (*)
- 3.An entity can be on 2nd Normal Form even if it has repeated values. True or False?
 - True
 - False (*)

Section 6 Lesson 4

- 1. No databases in the world is ever truly on 3rd Normal Form. Everyone always stops after 2nd Normal Form. True or False?
 - True
 - False (*)
- 2. Examine the following Entity and decide which sets of attributes breaks the 3rd Normal Form rule: (Choose Two)

ENTITY: TRAIN (SYNONYM: ROLLING STOCK)

ATTRIBUTES:

TRAIN ID

MAKE

MODEL

DRIVER NAME

DEPARTURE STATION

NUMBER OF CARRIAGES

NUMBER OF SEATS

DATE OF MANUFACTURE

(Choose all correct answers)

- TRAIN ID, MAKE
- DEPARTURE STATION, DRIVER NAME (*)
- NUMBER OF CARRIAGES, NUMBER OF SEATS (*)
- MODEL, DATE OF MANUFACTURE

3.As a database designer it is your job to store data in only one place and the best place. True or False?

- True (*)
- False

Section 7 Lesson 1

1.To visually represent exclusivity between two or more relationships in an ERD you would most likely use an _____.

- Arc (*)
- UID
- Subtype
- Supertype

2.All parts of a UID are mandatory. True or False?

- True (*)
- False

3. Which of the following can be added to a relationship?

- an attribute
- an arc can be assigned (*)
- a composite attribute
- an optional attribute can be created

4. Secondary UID's are

- not permitted in data modeling
- mandatory in data modeling
- useful as an alternative means identifying instances of an entity (*)
- always comprised of numbers

5. Which of the following would best be represented by an arc?

- STUDENT (senior, junior)
- STUDENT (graduating, non-graduating)
- STUDENT (will-attend-university, will-not-attend-university)
- STUDENT (University, Trade School) (*)

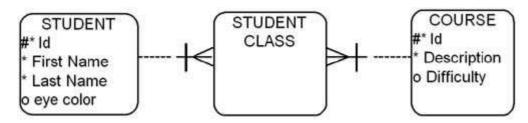
6. If the entity CD has the attributes: #number, *title, *producer, *year, o store name, o store address, this entity is in 3rd Normal Form ("no non-UID attribute can be dependent on another non-UID attribute). True or False?

- True
- False (*)

7. Which of the following is the definition for Third Normal Form?

- All attributes are single valued
- An attribute must be dependent upon entity's entire unique identifier
- No non-UID attribute can be dependent on another non-UID attribute (*)
- All attributes are uniquely doubled and independent

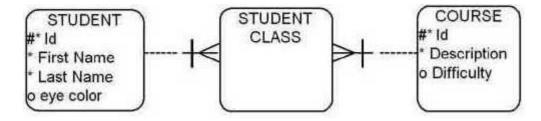
8. This diagram could also be expressed as a supertype/subtype construction. True or False?



- True
- False (*)

Section 7 Lesson 2

1. In this simple diagram, what comprises the unique identifier for the student class entity?



- · student id and class id
- · student id, class id and course id
- course id
- student id and course id (*)

2. Which of the following would be a good Unique Identifier for its Entity? (Choose Two)

(Choose all correct answers)

- Identification Number for Person (*)
- Birthdate for Baby Which Includes Hour, Minute, and Seconds (*)
- Order date for Order
- Vehicle Type Number for Car
- 3.A relationship can be both recursive and hierarchal at the same time. True or False?
 - True
 - False (*)
- 4.A recursive rationship should not be part of a UID. True or False?
 - True (*)
 - False

Section 7 Lesson 3

- 1. Historical data should always be kept. True or False?
 - True
 - False (*)
- 2. Modeling historical data can produce a unique identifier that includes a date. True or False?
 - True (*)
 - False
- 3. Audit trail attributes cannot be placed in the entities they are auditing, they must be placed in separate, new entities, created just for that purpose. True or False?
 - True
 - False (*)
- 4. Which of the following scenarios should be modeled so that historical data is kept? (Choose two)

(Choose all correct answers)

- LIBRARY and BOOK (*)
- STUDENT and AGE
- STUDENT and GRADE (*)
- LIBRARY and NUMBER OF STAFF

Section 8 Lesson 1

1. How does the dictionary define "consultant"?

- A person who knows everything
- One responsible for knowing everything
- One who gives expert or professional advice (*)
- None of the Above
- 2. Which of the following skills are required for Consultants. (Choose Two)

(Choose all correct answers)

- Communication skills (*)
- Excellent drawing skills
- Must be able to speak at least two languages fluently, preferably four or more
- Team-working skills (*)

3.Only Consultants can develop new data models for a company, they are mandatory, so companies must find them and hire them. True or False?

- True
- False (*)

Section 8 Lesson 2

1. Which of the following is a valid technique for effective public speaking?

- Making eye contact
- Using familiar words when communicating technical information
- Being enthusiastic
- All of the Above (*)

2. Your apperance at a presentation is not important, you should just show up and give the presentation in whatever clothes makes you comfortable. So feel free to wear Jeans and old T-Shirts etc. Being comfortable is more important than anything else. True or False?

- True
- False (*)

3. When you are involved in a group presentation, your group should practice before hand and agree on who presents the various parts. You should all be involved somehow. True or False?

- True (*)
- False

Section 10 Lesson 1

1. How do you know when to use the different types of time in your design?

- The rules are fixed and should be followed
- It depends on the functional needs of the system (*)
- You would first determine the existence of the concept of time and map it against the Greenwich Mean Time
- Always model time, you can take it out later if it is not needed

2.It is desirable to have an entity called DAY with a holiday attribute when you want to track special holidays in a payroll system. True or False?

- True (*)
- False

3. When you add the concept of time to your data model, you are:

- Simplifying your model.
- Adding complexity to your model. (*)
- Just changing the model, but this does not change the complexity of it.
- None of the above.

4. What is the benefit to the users of a system that includes "time," e.g. Start Date and End Date for Employees?

- Increased usability and flexibility of a system; we can the trace e.g. the different managers an employee had over time. (*)
- System becomes 100% unstable; allows users to log on and log off at will.
- Users are able to create complex programs in support of this component.
- Reporting becomes nearly impossible, users enjoy this.

5.If you are tracking employment dates for an employee, do you need to have an 'End Date' attribute?

- Yes, because you always need an end date when you have a start date
- No, because an end date is usually redundant
- Yes, if the company wants to track employee information, like multiple start and end dates
 (*)
- No, not if the company likes the employee

6. Which of the following would be a logical constraint when modeling time for a country entity?

- People have births and deaths in their countries that must be tracked by the system.
- If you are doing a system for France or Germany, you would need security clearance.
- Countries may need an end date in your system, because they can change fundamentally over time, e.g. Yugoslavia. (*)
- You need a constant record of countries, because they are still countries, even if leadership changes over time, e.g. France, USA and most other countries.

7. Modeling historical data produces efficient ways for a business to operate such as:

- Modeling historical data does not help a business.
- Providing valuable information via reports to management. (*)
- Keeping track of holiday dates.
- Employees can work in two time zones.

Section 10 Lesson 2

1. Why would you want to model a time component when designing a system that lets people buy bars of gold?

- The price of gold fluctuates and for determining price, you need to know the time of purchase (*)
- To allow the sales people to determine where the gold is coming from
- You would not want to model this, it is not important
- The Government of your country might want to be notified of this transaction.
- 2. What is the function of logging or journaling in conceptual data models?
 - Allows you to track the history of attribute values, relationships and/or entire entities (*)
 - Gives a timestamp to all entities
 - Represents entities as time in the data model
 - Creates a fixed time for all events in a data model

3. Which of the following is a logical constraint that could result from considering how time impacts an example of data storage?

- End Date must be before the Start Date.
- ASSIGNMENT periods can overlap causing the database to crash.
- An ASSIGNMENT may only refer to a COUNTRY that is valid at the Start Date of the ASSIGNMENT. (*)
- Dates can be valued only with Time.

4. You are doing a data model for a computer sales company, where the price goes down on a regular basis. If you want to allow them to modify the price and keep track of the changes, what is the best way to model this?

- A. Create a product entity and a related price entity with start and end dates, and then let the users enter the new price whenever required.
- B. Create a new item and a new price every day.
- C. Use a price entity with a start and end date.
- D. Allow them to delete the item and enter a new one.
- E. Both A and C (*)
- F. Both B and C

Test: Mid Term Exam - Database Design

Note your score.

Note your score. To return to your home page, click Home in the player navigation bar.

Score: 40 out of 50 Percentage Scored: 80 % Mastery Score: 60 % View Feedback

Se ignoră elementele de navigare în cont inutul paginii

Test: Mid Term Exam - Database Design

Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct

answer.

Section 1 Lesson 1

(Answer all questions in this section)

1. The main subject areas taught by the Oracle Academy are: Mark for

Review

(1) Points

Computer Repairs

Database performance tuning.

Data Modeling, SQL and PL/SQL (*)

Systems programming and computer architecture

Correct Correct

Section 1 Lesson 2 (Answer all questions in this section)

2. What is the difference between "information" and "data"? Mark for

Review

(1) Points

Data is held and understood only by Users

Information is held and understood only by users

Information and data have no differences - they are two words for the same thing

Data turns into information when it is stored in a database and accessed by systems and users (*)

Correct		Correct
which s Informa (1) Poir	ition?	3. Consider your school library. It will have a database with transaction details of corrows which books. Is a record of one student borrowing one book Data or Mark for Review
	Data (*	
	Informa	ation
	Both	
	Neither	
Incorrec	ct	Incorrect. Refer to Section 1.
		1 Lesson 3 or all questions in this section)
True or (1) Poir		4. Entities are transformed into Tables during the Database Design process? Mark for Review
	True (*)	
	False	
Correct		Correct
		1 Lesson 4 or all questions in this section)
their da for Revi (1) Poir	iew	5. Businesses involved in any of the following typically use databases to handle nce, Logistics, Commerce, Procurement and Distribution? True or False? Mark
	True (*)	
	False	

Correct	İ	Correct	
(1) Poir	nts	6.	Databases were invented in 1989. True or False? Mark for Review
	True		
	False (*)	
Correct		Correct	
		2 Lesso er all que	on 2 stions in this section)
Review (1) Poir		7.	An entity can have many Unique Identifiers. True or False? Mark for
	True (*))	
	False		
Correct	:	Correct	
(1) Poir	nts	8.	Relationship names are usually verbs. True or False? Mark for Review
	True (*))	
	False		
Incorre	ct		Incorrect. Refer to Section 2
(1) Poir		9. or Review	Which of the following statements about relationships are true? (Choose Two)
			(Choose all correct answers)
	They be	ecome F	oreign Keys in the database. (*)

They Must be Mandatory to be created in the database.					
They can be either mandatory or optional. (*)					
They must exist between two different Entities.					
Incorrect Incorrect. Refer to Section 2					
10. All of the following could be attributes of an ENTITY called PERSON except one. Select the incorrect one: Mark for Review (1) Points					
Haircolor					
Weight					
Gender					
Natacha Hansen (*)					
Correct Correct					
Page 1 of 5 Next Summary Se ignoră elementele de navigare în conț inutul paginii Test: Mid Term Exam - Database Design Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer. Section 2 Lesson 2 (Answer all questions in this section)					
11. All of the following would be instances of the entity ANIMAL SPECIES except which? Mark for Review (1) Points					
Dog					
Bird					
Elephant					
Leaf (*)					

```
Correct
               Correct
                        Which of the following entities most likely contains valid attributes? (Choose
                12.
       Mark for Review
two)
(1) Points
                        (Choose all correct answers)
        Entity: Home. Attributes: Number of Bedrooms, Owner, Address, Date Built (*)
        Entity: Pet. Attributes: Name, Birthdate, Owner (*)
        Entity: Car. Attributes: Owner Occupation, Owner Salary, Speed
        Entity: Mother. Attributes: Name, Birthdate, Occupation, Salary
                        Incorrect. Refer to Section 2
Incorrect
                13.
                        An entity is instantiated as a ? Mark for Review
(1) Points
        experience
        instance
        table (*)
        none of the above
                        Incorrect. Refer to Section 2
Incorrect
        Section 3 Lesson 1
        (Answer all questions in this section)
                14.
Relationship Names are optional. True or False?
        Mark for Review
(1) Points
                        True
                        False (*)
```

Correct		Correct
or False (1) Poin		15. One Relationship can be both mandatory and optional at different ends. True Mark for Review
	True (*)	
	False	
Correct		Correct
		3 Lesson 2 r all questions in this section)
symbol (1) Poin		16. To identify an attribute as part of a unique identifier on an ER diagram, the # front of it. True or False? Mark for Review
	True (*)	
	False	
Correct		Correct
(1) Poin	ıts	17. The single end of a Relationship is called: Mark for Review
	Single 7	Toe (*)
	Big Toe	
	Single F	Foot
	Crows I	Foot
Correct		Correct
	Section	3 Lesson 3

Previous

Page 2 of 5

Next

Summary

(Answer all questions in this section) Matrix Diagrams are mandatory when doing data modelling. True or False? Mark for Review (1) Points True False (*) Correct Correct Section 4 Lesson 1 (Answer all questions in this section) All instances of the supertype must be an instance of one of the subtypes. True or False? Mark for Review (1) Points True (*) False Correct Correct 20. Which of the following are suitable Entity names? (Choose Two) Mark for Review (1) Points (Choose all correct answers) **DOGS** ANIMAL (*) **ANIMALS** DOG (*) Correct Correct

	Se ignoră elementele de navigare în conț inutul paginii Test: Mid Term Exam - Database Design Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct				
answer	Section 4 Lesson 1 (Answer all questions in this section)				
(1) Poir	nts	21.	The "Other" subtype is mandatory. True or False? Mark for Review		
	True				
	False (*	·)			
Correct		Correct			
for Rev (1) Poin		22.	When creating entities you must follow these rules: (Choose Two) Mar	k	
			(Choose all correct answers)		
Name them in Plural					
	Name t	hem in S	Singular (*)		
	Exclude Attributes				
	es (*)				
Correct		Correct			
False? (1) Poir		23. r Reviev	You can only create relationships to a Supertype, not to a Subtype. True or v		
	True				
	False (*	·)			
Correct		Correct			

Section 4 Lesson 2
(Answer all questions in this section)

24. A new system would siness Rules as part of the documentation

24. A new system would have a mixture of both Procedural and Structural Business Rules as part of the documentation of that new system. True or False? Mark for Review

(1) Points

True (*)

False

Correct Correct

25. Why is it important to identify and document structural rules? Mark for

Review (1) Points

Ensures we know what data to store and how that data works together. (*)

Ensures nothing. There is no benefits to be gained from documenting your Structural Business Rules. We need to concentrate on the Procedural Business Rules only.

Ensures we know what Information to store and how that Information works together.

All of the Above.

Incorrect. Refer to Section 4

26. Can all constraints be modeled on an ER diagram? Mark for Review

(1) Points

No, in which case you should let the database administrator handle them

No, but you just explain them to the users so they can enforce them

Yes, all constraints must be modeled and shown on the ER diagram

No, so you should list them on a separate document to be handled programmatically (*)

Correct Correct

27. "Only teachers may supervise exams" is an example of which of the following Mark for Review(1) Points
A procedural business rule (*)
An attribute that should be stored on the PERSON entity
A structural business rule
An attribute that is not be inherited from the PERSON supertype and is unique to the TEACHER subtype
Correct Correct
Section 5 Lesson 1 (Answer all questions in this section)
28. A Diamond on a relationship indicates the Relationship as Non-Tranferrable. True or False? Mark for Review (1) Points
True (*)
False
Correct Correct
Section 5 Lesson 2 (Answer all questions in this section)
29. Which of the following pairs of entities is most likely to be modeled as a M:M relationship? (1) Points
CAR and WHEEL
TREE and BRANCH
PERSON and FINGERPRINT

TEACHER and SUBJECT AREA (*)

Correct	Correct					
relationship. (1) Points	30. A relationship from an entity back to itself is called a Mark for Review					
Manda	tory					
Recurs	ecursive (*)					
Many t	any to Many Optional					
Transfe	errable					
Correct	Correct					
Previous Page 3 of 5 Next Summary Se ignoră elementele de navigare în conț inutul paginii Test: Mid Term Exam - Database Design Review your answers, feedback, and question scores below. An asterisk (*) indicates a canswer. Section 5 Lesson 2 (Answer all questions in this section)						
(1) Points	31. Relationships can be Redundant. True or False? Mark for Review					
True (*)					
False						
Correct	Correct					
them document (1) Points	32. Many to many relationships must be left in the Model. It is important to have ted as M-M. True or False? Mark for Review					
True						
False (*)					

```
Correct
               Correct
        Section 6 Lesson 1
        (Answer all questions in this section)
               33.
All entities must be given a new artificial UID. True or False?
       Mark for Review
(1) Points
                       True
                       False (*)
Correct
               Correct
        Section 6 Lesson 2
        (Answer all questions in this section)
                       Until all attributes are single-valued, the database model is said to be: Mark
               34.
for Review
(1) Points
        Normalized
        Not Normalized (*)
        1st Normal Form
        2nd Normal Form
Correct
               Correct
        Section 6 Lesson 3
        (Answer all questions in this section)
                       Would it be a good idea to model age as an attribute of STUDENT
                                                                                              Mark
for Review
(1) Points
        Yes
        Maybe it could stop us having to calculate someones age every time we need it
```

So	Sometimes				
No	- it breaks the Normalization rules (*)				
Correct	Correct				
	ection 7 Lesson 1 nswer all questions in this section)				
for Review (1) Points	36. An arc can be modelled as Supertype and Subtypes. True or False? Mark				
Tru	ue (*)				
Fa	lse				
Correct	Correct				
True or Fa (1) Points	37. Arcs are Mandatory in Data modelling. All ERD's must have at least one Arc llse? Mark for Review				
Tro	ue				
Fa	lse (*)				
Correct	Correct				
Review (1) Points	38. Which of the following would best be represented by an arc? Mark for				
TE	EACHER (Female, Bob)				
DE	ELIVERY ADDRESS (Home, Office) (*)				
PA	ARENT (Girl, Bob)				

STUDENT (Grade A student, Average Student)

Correct		Correct			
(1) Poir	nts	39.	No parts of a UID are mandatory. True or False?	Mark for Review	
	True				
	False (*)			
Correct		Correct			
(1) Poir	40. All relationships participating in an arc must be mandatory. True or False Mark for Review (1) Points				
	True				
	False (*)			
Incorrec	ct		Incorrect. Refer to Section 7		
	Se ignoid Term your ar . Section	oră eleme Exam - nswers, f 5 Lesso	of 5 Next Summary entele de navigare în conț inutul paginii Database Design feedback, and question scores below. An asterisk (*) indi on 2 estions in this section)	icates a correct	
(1) Poir	nts	31.	Relationships can be Redundant. True or False?	Mark for Review	
	True (*))			
	False				
Correct		Correct			
them do	ocument	32. ted as M	Many to many relationships must be left in the Model. It I-M. True or False? Mark for Review	is important to have	

(1) Poir	nts						
	True						
	False (*	False (*)					
Correct	:	Correct	t				
		6 Lesser all que	on 1 estions in this section)				
		33.					
All entit	ies mus	t be give	en a new artificial UID. True or False?				
(1) Poir		r Revie	w True False (*)				
Correct	ī	Correct	t				
		6 Lesser all que	on 2 estions in this section)				
for Rev (1) Poir		34.	Until all attributes are single-valued, the database model is said to be:	Mark			
	Normal	ized					
	Not Normalized (*)						
	1st Normal Form						
	2nd No	rmal Fo	rm				
Correct	:	Correct	t				
		6 Lesser all que	on 3 estions in this section)				
		35.	Would it be a good idea to model age as an attribute of STUDENT	Mark			

for Revie (1) Points		
Y	′es	
Ν	/laybe it	could stop us having to calculate someones age every time we need it
S	Sometin	es
N	lo - it bi	eaks the Normalization rules (*)
Correct	(Correct
		Lesson 1 all questions in this section)
for Revie (1) Points	ew.	66. An arc can be modelled as Supertype and Subtypes. True or False? Mark
Т	rue (*)	
F	alse	
Correct	(Correct
True or F (1) Points	alse?	Arcs are Mandatory in Data modelling. All ERD's must have at least one Arc. Mark for Review
Т	rue	
F	alse (*)	
Correct		Correct
Review (1) Points		88. Which of the following would best be represented by an arc? Mark for
Т	EACHE	R (Female, Bob)

DELIV	ERY ADDRESS (Home, Office) (*)					
PAREI	PARENT (Girl, Bob)					
STUDI	ENT (Grade A student, Average Student)					
Correct	Correct					
(1) Points	39. No parts of a UID are mandatory. True or False? Mark for Review					
True						
False	(*)					
Correct	Correct					
Mark f	40. All relationships participating in an arc must be mandatory. True or False? or Review					
True						
False	(*)					
Incorrect	Incorrect. Refer to Section 7					
Test: Mid Term Review your a answer. Section	Page 4 of 5 Next Summary oră elementele de navigare în conț inutul paginii n Exam - Database Design nswers, feedback, and question scores below. An asterisk (*) indicates a correct n 7 Lesson 2 er all questions in this section)					
for Review (1) Points	41. A recursive relationship must Mandatory at both ends. True or False? Mark					
True						

	False (*)	
Correct	: (Correct
		7 Lesson 3 all questions in this section)
kept? ((Choose t	Which of the following scenarios should be modeled so that historical data is Mark for Review
		(Choose all correct answers)
	BABY aı	nd AGE
	CUSTO	MER and PAYMENTS (*)
	TEACHE	R and AGE
	CUSTO	MER and ORDERS (*)
Correct	; (Correct
		3 Lesson 1 all questions in this section)
delivers	within th	Consultants often use their experience in ensuring projects stay on track and e timescales set out for the project. True or False? Mark for Review
	True (*)	
	False	
Correct	;	Correct
		3 Lesson 2 all questions in this section)
present	able. Tru	14. Your apperance at a presentation is important. You need to look smart and e or False? Mark for Review

Tr	ue (*)	
Fa	lse	
Correct	Correct	
(A	45.	estions in this section) All systems must have an entity called WEEK with a holiday attribute, so you
know where (1) Points	n to give youi	r employees a holiday. True or False? Mark for Review
Tr	ue	
Fa	lse (*)	
Incorrect		Incorrect. Refer to Section 10
(1) Points	46.	Modeling historical data is Optional. True or False? Mark for Review
Tr	ue (*)	
Fa	llse	
Correct	Correct	
for Review (1) Points	47.	There is only one way to model time in a Data Model. True or False? Mark
Tr	ue	
Fa	lse (*)	
Correct	Correct	

Review (1) Poir		48.	What do users of a system without the concept of time loose? Mark for
	Journa	lling bec	omes much easier.
	Journa	lling bec	omes slightly harder.
	The ab	ility to tra	ack data over time. (*)
	Nothing	g is lost i	f a system does not track time.
Incorre	ct		Incorrect. Refer to Section 10
		n 10 Less er all que	son 2 stions in this section)
that lets		49. buy sha	Why would you want to model a time component when designing a system ares via the Internet? (Choose Two) Mark for Review
			(Choose all correct answers)
this info	This wo		be required in the US to allow the New York Stock Exchange to be notified of
price. (w the sa	les people to determine when the shared were bought and therefore at what
	You wo	ould not v	want to model this, it is not important.
purchas		ce of sha	ares fluctuates and for determining price, you need to know the time of
Incorre	ct		Incorrect. Refer to Section 10
concep (1) Poir		50. a models	All systems must include functionality to provide logging or journaling in s. True or False? Mark for Review
	True		
	False (*)	

Correct	t	Correct										
Previou	ıs	Page 5	of 5 Sur	mmary								
Test: M	id Term your ar	Exam -	e navigare îr Database D eedback, an	esign			v. An a	sterisk ((*) indic	ates a	correct	
answei	Section	ı 2 Lesso er all que	on 2 estions in this	s section)								
the finis (1) Poir		11. stem.	A/an Mark for Re	is a eview	picture	of all ti	he info	rmation	that wil	l form t	he basi	is for
	ERD (*)										
	Proces	S										
	Table											
	Attribut	e										
Correct	t	Correct	:									
Review (1) Poir		12.	An entity ca	an have m	nany Ur	nique Id	entifier	s. True	or False	e?	Mark fo	or
	True (*))										
	False											
Correct	t	Correct										
two) (1) Poir		13. or Reviev	Which of th	e followin	g entitie	es most	t likely	contains	s valid a	attribute	es? (Ch	oose
			(Choose all	correct a	answers	s)						
	Entity:	Home. A	attributes: Nu	ımber of I	Bedroor	ms, Ow	ner, Ac	ldress,	Date Bu	uilt (*)		

Entity: Pet. Attributes: Name, Birthdate, Owner (*)

Entity: Car. Attributes: Owner Occupation, Owner Salary, Speed

Entity: Mother. Attributes: Name, Birthdate, Occupation, Salary

Correct Correct

Section 3 Lesson 1 (Answer all questions in this section)

14. In a business that sells pet food choose the best relationship name between FOOD TYPE and ANIMAL (e.g. dog, horse or cat). (Choose Two) Mark for Review (1) Points

(Choose all correct answers)

Each FOOD TYPE must be suitable for one or more ANIMALs. (*)

Each ANIMAL must be the seller of one or more FOOD TYPES.

Each FOOD TYPE may be made from one or more ANIMALs.

Each FOOD TYPE may be given to one or more ANIMALs. (*)

Correct Correct

15.

Relationship Degree/Cardinality is important. True or False?

Mark for Review

(1) Points

True (*) False

Correct Correct

Section 3 Lesson 2 (Answer all questions in this section)

16. The many end of a Relationship is called: Mark for Review

(1) Points

Gulls F	Foot
Pigs E	ar
Crows	Ear
Crows	Foot (*)
Correct	Correct
Top Left Hand (1) Points	17. All the Attributes in a system are just written on the ERD, and they all go in the Corner of the paper. True or False? Mark for Review
True	
False ((*)
Correct	Correct
	n 3 Lesson 3 er all questions in this section)
Mark for (1) Points	18. Matrix Diagrams are mandatory when doing data modelling. True or False? or Review
True	
False ((*)
Correct	Correct
	n 4 Lesson 1 er all questions in this section)
(1) Points	19. Which of the following is true about subtypes? Mark for Review

	One instance may belong to two subtypes of the same supertype.
	Subtypes must be mutually exclusive. (*)
	Subtypes must not be mutually exclusive.
itself.	Subtype entities may not have relationships to the other subtype entities, only the supertype
Correct	Correct
False? (1) Poir	20. You can only create relationships to a Supertype, not to a Subtype. True or Mark for Review ints
	True
	False (*)
Correct	Correct
	Se ignoră elementele de navigare în conț inutul paginii id Term Exam - Database Design your answers, feedback, and question scores below. An asterisk (*) indicates a correct
Review (1) Poir	
	Computer Repairs
	Database performance tuning.
	Data Modeling, SQL and PL/SQL (*)
	Systems programming and computer architecture
Correct	Correct

Section 1 Lesson 2 (Answer all questions in this section)

2. What is the difference between "information" and "data"? Mark for

Review

(1) Points

Data is held and understood only by Users

Information is held and understood only by users

Information and data have no differences - they are two words for the same thing

Data turns into information when it is stored in a database and accessed by systems and users (*)

Correct Correct

3.

Information which was gained from data is the same as: (Choose Two)

Mark for Review

(1) Points

(Choose all correct answers)

Knowledge (*) Raw Materials Intelligence (*)

There is no difference between data and information.

Correct Correct

Section 1 Lesson 3 (Answer all questions in this section)

4. The first step in system development is to document the requirements. Why? Mark for Review

(1) Points

Wrong. A blueprint for the database design is not needed. We can just start coding straight away.

It clarifies what a business wants to accomplish, and provides measures for deciding if the system delivers all that is required. (*)

	It allows	s applica	tion development to be conducted without having to consider database design.
	It keeps	s busines	sses honest.
Correct		Correct	
		1 Lesso er all que	on 4 stions in this section)
(Choose (1) Poir		5. Mark fo	Oracle Database Software provides which of the following functionality? r Review
			(Choose all correct answers)
	Graphic	cal User	Interface (*)
	Internet	Browse	ır
	Server	(*)	
	Operati	ng Syste	ems
Incorred	ct		Incorrect. Refer to Section 1.
(1) Poir	nts	6.	Databases were invented in 1989. True or False? Mark for Review
	True		
	False (*	*)	
Correct		Correct	
		2 Lesso r all que	on 2 stions in this section)
model. (1) Poir		7. False?	The entity/relationship model is created before the physical database design Mark for Review

	True (*))	
	False		
Correct		Correct	
you are (1) Poir		8. lata mod	Volatile entities have special requirements and need special attention when lelling. True or False? Mark for Review
	True (*))	
	False		
Correct		Correct	
(1) Poir	nts	9.	An entity is instantiated as a ? Mark for Review
	experie	ence	
	instanc	е	
	table (*)	
	none of	f the abo	ve
Correct		Correct	
(1) Poir	nts	10.	Primary Unique Identifiers (Choose Two) Mark for Review
			(Choose all correct answers)
	Are Re	quired. T	The data model is not complete until all entities have a Primary UID. (*)
	Disting	uish eac	h instance of an entity from all others (*)
	Are not	required	d

You may create more than one Primary Unique Identifier for an entity

Correct		Correct		
	Se igno id Term your an	ră eleme Exam - swers, fe	Summary entele de navigare în conț inutul paginii Database Design eedback, and question scores below. An asterisk (*) indicates a cor	rect
		4 Lesso r all que	on 1 stions in this section)	
for Rev (1) Poir		21.	Which of the following are suitable Entity names? (Choose Two)	Mark
			(Choose all correct answers)	
	DOGS			
	ANIMAI	_ (*)		
	ANIMA	LS		
	DOG (*)		
Correct		Correct		
for Rev (1) Poir		22.	A supertype can only have two subtypes and no more. True or Fals	se? Mark
	True			
	False (*	·)		
Correct		Correct		
Review (1) Poir	nts	23.	A Supertype can have only one subtype. True or False? Ma	irk for
	True			

	False (*)
Correct		Correct
		4 Lesson 2 r all questions in this section)
Busines Review (1) Poin	ss Rules	24. A new system would have a mixture of both Procedural and Structural as part of the documentation of that new system. True or False? Mark for
	True (*)	
	False	
Correct		Correct
paid any (1) Poin	y outstar	25. A business rule such as "We only ship goods after customers have completely nding balances on their account" is best enforced by: Mark for Review
	Making	the payment attribute null.
	Making	the payment attribute optional.
	We nee	d to trust our customers, and we know they will pay some day.
until the		programmer to create additional programming code to verify no goods are shipped t has been settled in full. (*)
Correct		Correct
(1) Poin	Mark for	26. "Only teachers may supervise exams" is an example of which of the following? r Review
	A proce	dural business rule (*)
	An attrik	oute that should be stored on the PERSON entity

^	_1	والمراجعة والمراجعة	
Д	STRUCTURE	al husiness	rille

An	attribute	that is	not be	inherited	from	the	PERSON	supertype	and	is unio	que t	o t	he
TEACHER	subtype												

Correct Correct 27. Can all constraints be modeled on an ER diagram? Mark for Review (1) Points No, in which case you should let the database administrator handle them No, but you just explain them to the users so they can enforce them Yes, all constraints must be modeled and shown on the ER diagram No, so you should list them on a separate document to be handled programmatically (*) Correct Correct Section 5 Lesson 1 (Answer all questions in this section) Transferable relationships can only be mandatory, not optional. True or False? Mark for Review (1) Points True False (*) Correct Correct Section 5 Lesson 2 (Answer all questions in this section) A relationship from an entity back to itself is called a _____ Mark for Review relationship. (1) Points

Mandatory
Recursive (*)
Many to Many Optional
Transferrable
Correct Correct
30. If two entities have two relationships between them, these relationships car be either or? Mark for Review (1) Points
Redundant or Required (*)
Replicated or Required
Resourced and Really Good
Redundant and Replicated
Correct Correct
Previous Page 3 of 5 Next Summary Se ignoră elementele de navigare în conț inutul paginii Test: Mid Term Exam - Database Design Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 5 Lesson 2 (Answer all questions in this section)
31. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points
One to Many Optional
One to Many Mandatory
One to One Optional (*)

	Many to	o Many	Mandatory	
Correct	t	Correct		
(1) Poir	nts	32.	Relationships can be Redundant. True or False? Mark for Review	
	True (*)		
	False			
Correct	t	Correct		
		n 6 Lesso er all que	on 1 estions in this section)	
		33.		
All entit	ties mus	t be give	en a new artificial UID. True or False?	
(1) Poir		or Reviev	N	
(1) FOII	11.5		True False (*)	
Correct	t	Correct		
		n 6 Lesso er all que	on 2 estions in this section)	
rules of (1) Poir		34.	When data is stored in one place in a database, the database conforms to the Mark for Review	ıe
	Normal	lity		
	Reduct	ion		
	Normal	ization (*)	
	Multipli	cation		

Correct

Correct

```
Section 6 Lesson 3
       (Answer all questions in this section)
                       Any Non-UID must be dependent on the entire UID. True or False?
                                                                                           Mark
for Review
(1) Points
       True (*)
       False
Correct
               Correct
       Section 7 Lesson 1
       (Answer all questions in this section)
               36.
                       Which of the following would best be represented by an arc?
                                                                                   Mark for
Review
(1) Points
       TEACHER (Female, Bob)
       DELIVERY ADDRESS (Home, Office) (*)
       PARENT (Girl, Bob)
       STUDENT (Grade A student, Average Student)
Correct
               Correct
               37.
                       Consider the entity ADDRESS with the attributes:
ADDRESS:
# House Number
* Street
* Town
* City
* Year of Build
o City Population
```

This entity is NOT in 3rd Normal Form ("no non-UID attribute can be dependent on another non-UID attribute). True or False?

Marl (1) Points	k for Revie	w
True	e (*)	
Fals	e	
Correct	Correc	t
relationships (1) Points	38. s in an ERD	Arcs are used to visually represent between two or more D. Mark for Review
Sam	neness	
Diffe	erencies	
Excl	usivity (*)	
An A	Arc is what	Noah sailed on with all the animals.
Correct	Correc	t
(1) Points	39.	Which of the following is NOT a relationship type? Mark for Review
Som	ne to None	(*)
One	to One	
One	to Many	
Man	y to Many	
Correct	Correc	t
for Review (1) Points	40.	An arc can be modelled as Supertype and Subtypes. True or False? Mark

True	(*)	
False	е	
Correct	Correct	
Test: Mid Te	rm Exam -	of 5 Next Summary entele de navigare în conț inutul paginii Database Design feedback, and question scores below. An asterisk (*) indicates a correct
	ion 7 Lesso wer all que	on 2 estions in this section)
Hierachy, tho (1) Points	41. ough not at	A particular problem may be solved using either a Recursive Realtionship or a the same time. True or False? Mark for Review
True	(*)	
False	Э	
Correct	Correct	
	ion 7 Lesso wer all que	on 3 estions in this section)
kept? (Choose (1) Points	42. se two)	Which of the following scenarios should be modeled so that historical data is Mark for Review
		(Choose all correct answers)
BAB	Y and AGE	<u> </u>
CUS	TOMER aı	nd PAYMENTS (*)
TEA	CHER and	AGE
CUS	TOMER aı	nd ORDERS (*)
Correct	Correct	

	Section 8 Lesson 1 (Answer all questions in this section)
delivers (1) Poir	43. Consultants often use their experience in ensuring projects stay on track and swithin the timescales set out for the project. True or False? Mark for Review into
	True (*)
	False
Correct	Correct
	Section 8 Lesson 2 (Answer all questions in this section)
(Choose (1) Poir	44. Which of the following are NOT valid techniques for effective public speaking? e Two) Mark for Review hts
	(Choose all correct answers)
	Whispering (*)
informa	Using specialist language and technical abbreviations when communicating technical tion (*)
	Being enthusiastic
	All of the Above
Correct	Correct
	Section 10 Lesson 1 (Answer all questions in this section)
know w (1) Poin	45. All systems must have an entity called WEEK with a holiday attribute, so you then to give your employees a holiday. True or False? Mark for Review hts
	True
	False (*)

Incorrect	Incorrect. Refer to Section 10
more complex. (1) Points	46. When you add the concept of time to your data model, your model becomes True or False? Mark for Review
True (*)
False	
Correct	Correct
City entity? (1) Points	47. Which of the following would be a logical constraint when modeling time for a Mark for Review
People	are born in the city and people die in the city.
Cites n country change	nay change their name and/or which country they are placed in, if the borders of a e. (*)
If you a	are doing a system for any French City, you would need security clearance
	eed a constant record of cities because they are still cities, even if leadership changes they get a new Mayor
Incorrect	Incorrect. Refer to Section 10
for Review (1) Points	48. There is only one way to model time in a Data Model. True or False? Mark
True	
False (*)
Correct	Correct

Section 10 Lesson 2 (Answer all questions in this section)

49. Which of the following is a logical constraint, that could result from considering how time impacts data storage? Mark for Review
(1) Points

An ASSIGNMENT may only refer to an EMPLOYEE with a valid employee record at the Start Date of the ASSIGNMENT. (*)

EMPLOYEE periods can overlap causing the database to crash.

End Date must be before the Start Date.

Dates must be stored with Time.

Correct Correct

50. Why would you want to model a time component when designing a system that lets people buy shares via the Internet? (Choose Two) Mark for Review (1) Points

(Choose all correct answers)

This would only be required in the US to allow the New York Stock Exchange to be notified of this information.

To allow the sales people to determine when the shared were bought and therefore at what price. (*)

You would not want to model this, it is not important.

The price of shares fluctuates and for determining price, you need to know the time of purchase (*)

Correct Correct

Previous Page 5 of 5 Summary

Test: Mid Term Exam - Database Design

Knowledge (*)

Review your ar answer.	nswers, f	eedback, and question scores below. An asterisk (*) indicates a correct
Section	n 1 Lesso	n 1
(Answe	er all que	estions in this section)
the future, as t for Review	1. :he world	The market for IT professionals is still increasing and will continue to do so in digets ever more dependent on computer systems. True or False? Mark
(1) Points		
		True (*)
		False
		Correct
Section	n 1 Lesso	on 2
(Answe	er all que	estions in this section)
for Review	2.	Information which was gained from data is the same as: (Choose Two) Mark
(1) Points		
		(Choose all correct answers)

	Raw Materials
	Intelligence (*)
	There is no difference between data and information.
	Correct
	3. Consider your school library. It will have a database with transaction details nt borrows which books. Is a record of one student borrowing one book Data or Mark for Review
(1) Points	
	Data (*)
	Information
	Both
	Neither
	Correct
	Correct
Section	n 1 Lesson 3
	er all questions in this section)
•	•

4. The first step in system development is to document the requirements. Why? Mark for Review
(1) Points
Wrong. A blueprint for the database design is not needed. We can just start coding straight away.
It clarifies what a business wants to accomplish, and provides measures for deciding if the system delivers all that is required. (*)
It allows application development to be conducted without having to consider database design.
It keeps businesses honest.
Correct
Section 1 Lesson 4
(Answer all questions in this section)
5. Databases perform these functions Mark for Review (1) Points
Running multiple applications on multiple client-servers

Providing integrated software on fast processing servers
Providing software running on a variety of platforms and configurations allowing companies a structured way to access and manage their data (*)
They run purely as client-based software on personal computers
Correct
 Software cannot operate without Hardware. True or False? Mark for
Review (1) Points
True (*)
False
Correct
Section 2 Lesson 2
(Answer all questions in this section)

	7.	Relationship names are usually verbs. True or False? Mark for Review
(1) Points		
		True (*)
		False
		. disc
		Correct
	0	
Review	8.	In a physical data model, a relationship is represented as a? Mark for
(1) Points		
		Column
		Row
		Now
		Instance
		Foreign Key (*)
		Correct
		Correct

two)	9. Mark for Revie	Which of the following entities most likely contains valid attributes? (Choose w
(1) Pc	oints	
		(Choose all correct answers)
Address, Date Buil	ess, Date Built (*)	Entity: Home. Attributes: Number of Bedrooms, Owner,
		Entity: Pet. Attributes: Name, Birthdate, Owner (*)
Speed	d	Entity: Car. Attributes: Owner Occupation, Owner Salary,
Salary	<i>(</i>	Entity: Mother. Attributes: Name, Birthdate, Occupation,
		Correct
mode	10. el. True or False? pints	The entity/relationship model is created before the physical database design Mark for Review
		True (*)
		False

Correct
est: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 2 Lesson 2
(Answer all questions in this section)
11. All of the following are examples of ENTITY: Instance except two. Select the answers that are ENTITY: Instance. (Choose Two) Mark for Review
(1) Points
(Choose all correct answers)
TRANSPORTATION METHOD: Car (*)
ANIMAL: Dog (*)
MEAT PRODUCT: Lettuce
BODY PART: Larry Ellison
Correct

Section 3 Lesson 1

	12.	An entity can have many Unique Identifiers. True or False?	Mark for
Review			
(1) Points			
		True (*)	
		False	
		Correct	
you are doing	13. data mo	Volatile entities have special requirements and need special at odelling. True or False? Mark for Review	ention when
(1) Points			
		True (*)	
		1146 ()	
		Falsa	
		False	
		Correct	

swer all questions in t	his section)
-------------------------	--------------

False? Mark	14. for Revie	Relationships represents something of significance to the business? To ew	rue or
(1) Points			
		True (*)	
		False	
		Correct	
for Review (1) Points	15.	Which of the following are valid relationship degrees? (Choose two)	Mark
		(Choose all correct answers)	
		1:1 (*)	
		1:M (*)	
		1:0	
		0:0	

	Correct		
Section	a 3 Lesson 2		
(Answe	(Answer all questions in this section)		
(4) 5	16. The single end of a Relationship is called: Mark for Review		
(1) Points			
	Single Toe (*)		
	Big Toe		
	Single Foot		
	Crows Foot		
	Correct		
	Correct		
True or False?	17. Entity Boxes are drawn with 90 degree angles, also known as Hard Boxes Mark for Review		
(1) Points			

Correct

Section 4 Lesso	n 1
(Answer all que	estions in this section)
19. have to. True or False?	All instances of a subtypes may be an instance of the supertype but does not Mark for Review
(1) Points	
. ,	
	True
	False (*)
	Correct
20. (1) Points	Which of the following is true about subtypes? Mark for Review
supertype.	One instance may belong to two subtypes of the same
	Subtypes must be mutually exclusive. (*)
	Subtypes must not be mutually exclusive.

Subtype entities may not have relationships to the other subtype entities, only the supertype itself.		
	Correct	
Test: Mid Term Exam - Database Design		
Review your answers, feedback, and question scoanswer.	res below. An asterisk (*) indicates a correct	
Section 4 Lesson 1		
(Answer all questions in this section)		
21. When creating entities you for Review	u must follow these rules: (Choose Two) Mark	
(1) Points		
(Choose all correct answer	rs)	
Name the	m in Plural	
Name the	m in Singular (*)	
Exclude At	tributes	
Include At	tributes (*)	

	Correct
(1) Points	22. The "Other" subtype is mandatory. True or False? Mark for Review
	True
	False (*)
	Correct
True or False? (1) Points	23. All instances of the supertype must be an instance of one of the subtypes. Mark for Review
	True (*)
	False
	Correct
	Correct

Section 4 Lesson 2

(Answe	er all questions in this sec	ction)
Review (1) Points	24. Why is it impor	tant to identify and document structural rules? Mark for
works together	r. (*)	Ensures we know what data to store and how that data
documenting y Rules only.	our Structural Business	Ensures nothing. There is no benefits to be gained from Rules. We need to concentrate on the Procedural Business
Information wo	orks together.	Ensures we know what Information to store and how that
		All of the Above.
		Correct
following? (1) Points	25. "Only teachers Mark for Review	may supervise exams" is an example of which of the
		A procedural business rule (*)
		An attribute that should be stored on the PERSON entity

A structural business rule

An attribute that is not be inherited from the PERSON supertype and is unique to the TEACHER subtype
Correct
26. Business rules are important to data modelers. True or False? Mark for Review (1) Points
True (*)
False
Correct
27. A business rule such as "We only ship goods after customers have complete paid any outstanding balances on their account" is best enforced by: Mark for Review (1) Points
Making the payment attribute null.

 $\label{eq:making the payment attribute optional.}$

some day.	We need to trust our customers, and we know they will pay
to verify no goods are shipped until the	Hiring a programmer to create additional programming code account has been settled in full. (*)
	Correct
Section 5 Lesson 1	
(Answer all questions in this se	ction)
	p can NOT be moved between instances of the entities it or Review
	Mandatory
	Optional
	Transferrable
	Non-Transferable (*)

Section 5 Lesson 2 (Answer all questions in this section) 29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review (1) Points		Correct
(Answer all questions in this section) 29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
(Answer all questions in this section) 29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
(Answer all questions in this section) 29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
(Answer all questions in this section) 29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
29. What uncommon relationship is described by the statements: "Each DNA SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
SAMPLE may be taken from one and only one PERSON and each PERSON may provide one and only one DNA SAMPLE" Mark for Review (1) Points One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review	(Answer all ques	tions in this section)
One to Many Optional One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review	SAMPLE may be taken fr	om one and only one PERSON and each PERSON may provide one and only
One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review	(1) Points	
One to Many Mandatory One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		One to Many Optional
One to One Optional (*) Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		One to Many Mandatory
Many to Many Mandatory Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		
Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		One to One Optional (*)
Correct 30. If two entities have two relationships between them, these relationships can be either or? Mark for Review		Many to Many Mandatory
30. If two entities have two relationships between them, these relationships can be either or ? Mark for Review		a,a,a,
30. If two entities have two relationships between them, these relationships can be either? Mark for Review		
be either or? Mark for Review		Correct
be either or? Mark for Review		
be either or? Mark for Review		
\-\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2	(1) Points	· · · · · · · · · · · · · · · · ·

Redundant or Required (*)
Replicated or Required
Resourced and Really Good
Redundant and Replicated
Test: Mid Term Exam - Database Design
Review your answers, feedback, and question scores below. An asterisk (*) indicates a correct answer.
Section 5 Lesson 2
(Answer all questions in this section)
31. Many to many relationships must be left in the Model. It is important to have them documented as M-M. True or False? Mark for Review (1) Points
True
False (*)
Correct

	32.	Relationships can be Redundant. True or False? Mark for Review
(1) Points		
		True (*)
		False
		Correct
Section	. E Loss	on 1
(Answe	er all qu	uestions in this section)
numbers, custo	33. omer ID	People are not born with "numbers," but a lot of systems assign student 0s, etc. A shoe has a color, a size, a style, but may not have a descriptive
"number". So,	to be a	ble to uniquely and efficiently identify one instance of the entity SHOE, a/an $$
	טוט	can be created. Mark for Review
(1) Points		
		artificial (*)
		unrealistic
		structured
		identification

		Correct		
Section 6 Less	son 2			
(Answer all qu	uestions in this section)			
34. Mark for Revi		ated values is said to	o be on 1st Normal Form. Tr	ue or
nts				
	True (*	1		
	nue	1		
	False			
		Correct		
Section 6 Less	son 3			
(Answer all qu	uestions in this section)			
35.	When is an entity in 2n	d Normal Form?	Mark for Review	
	34. Mark for Revi	Mark for Review True (*) False Section 6 Lesson 3 (Answer all questions in this section)	Section 6 Lesson 2 (Answer all questions in this section) 34. An entity without repeated values is said to Mark for Review Its True (*) False Correct Correct	Section 6 Lesson 2 (Answer all questions in this section) 34. An entity without repeated values is said to be on 1st Normal Form. Tr Mark for Review Its True (*) False Correct Section 6 Lesson 3 (Answer all questions in this section)

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(1) Points	
UID. (*)	When all non-UID attributes are dependent upon the entire
independent on the primary key.	When no attritibutes are mutually independant and fully
fully dependent on the primary key.	When no attritibutes are mutually independent and all are
	None of the Above.
	Correct
Section 7 Lesson 1	
(Answer all questions in this so	ection)
36. Consider the e	entity ADDRESS with the attributes:
ADDRESS:	
# House Number	
* Street	
* Town	
* City	

* Year of Build	
o City Population	
	n ("no non-UID attribute can be dependent on another non-UID for Review
(1) Points	
	True (*)
	False
	Correct
37. No parts of a	UID are mandatory. True or False? Mark for Review
(1) Points	
	True
	False (*)
	Correct

38. All relationships participating in an arc must be mandatory. True or False? Mark for Review

TEACHER (Female, Bob)

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	DELIVERY ADDRESS (Home, Office) (*)
	PARENT (Girl, Bob)
Number for Book (*)	STUDENT (Grade A student, Average Student)
	Date of birth for Baby
	Correct
Section 7 Lesson 3	
(Answer all questions in this so	ection)
42. If Audit trail at they are auditing. True or False? (1) Points	ttributes are added to an entity they must be in the entities Mark for Review
	True (*)
	False

Correct

46. All systems must have an entity called WEEK with a holiday attribute, so you know when to give your employees a holiday. True or False? Mark for Review

(1) Points

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	48.	There is only one way to model time in a Data Model. True or False? Mark
for Review		
(1) Points		
		True
		F 1 (*)
		False (*)
		Correct
Section	n 10 Les	son 2
(Answe	er all qu	estions in this section)
	49.	You are doing a data model for a computer sales company, where the price
		nt on what day of the week goods are shipped. So shipping is more expensive it delivery to take place on a Saturday or Sunday. What would be the best way to
model this?		or Review
(1) Points		
,		
		Lles a Delivery Deventity, which holds write a conjust week
days, and ensu	ire the v	Use a Delivery Day entity, which holds prices against week ve also have an attribute for the Requested Delivery Day in the Order Entity. (*
•		
change.		Email current price to all employees whenever the prices
-		

Update the prices in the system, print out the current prices when they change and pin them on the company noticeboard	
A	Allow them to enter whatever delivery charge they want.
	Correct
50. Why would you we that lets people buy shares via the Interr (1) Points	want to model a time component when designing a system net? (Choose Two) Mark for Review
(Choose all corre	ect answers)
T Stock Exchange to be notified of this info	This would only be required in the US to allow the New York prmation.
Twere bought and therefore at what price	To allow the sales people to determine when the shared e. (*)
Y	ou would not want to model this, it is not important.
need to know the time of purchase (*)	The price of shares fluctuates and for determining price, you
	Correct