Which statement(s) is(are) true about an id-dependent entity?

i. An id-dependent entity has a composite identifier.

ii. An id-dependent entity does not have an identifier.

iii. An id-dependent entity has the same identifier as the entity whose existence it is dependent on.

Group of answer choices

- (•) Only statement I
- ( ) All 3 statements
- ( ) Only statement iii
- ( ) Only statement ii

Determine the candidate key(s) for the relation R(A, B, C, D), given the functional dependency and multi-valued dependency:

i. A ->-> B

ii. A -> C, D

Group of answer choices

- ( ) There are two candidate keys: A and B
- ( ) There is one candidate key: A
- ( ) There is one candidate key: B
- (•) There is one composite candidate key: (A, B)

What is the purpose of normalisation?

Group of answer choices

- ( ) Improve speed of retrieving data
- ( ) Allow proper data analysis
- (•) Eliminate modification anomalies
- ( ) Eliminate data redundancy

Determine the set of relations in 3NF and 4NF for the relation R(A, B, C, D) and the functional dependency and multi-valued dependency:

i. A ->-> B

ii. A -> C, D

Group of answer choices

- ( ) R1(A, C, D) with primary key A and foreign key A, and R2(A, B) with composite primary key (A,B).
- (•) R1(A, C, D) with primary key A, and R2(A, B) with composite primary key (A,B), and foreign key A.
- ( ) R1(A, C, D) with primary key A, and R2(B, C, D) with primary key B
- ( ) R(A, B, C, D) with composite primary key (A,B)

Given this scenario: A customer can make many purchases, and each purchase is for one or more items. Each purchased item is sold at the current price of the corresponding item sold by a company. The current price of an item changes over time, and each item is supplied by several suppliers.

Which aspect of this scenario shows the N:M strong pattern?

Group of answer choices

- (•) The relationship between purchase and purchased item
- ( ) The relationship between purchased item and item
- ( ) The relationship between customer and purchase
- ( ) The relationship between supplier and item

Why is the design of a database an important consideration?

Group of answer choices

- ( ) It helps with data consistency
- (•) All of the above
- ( ) It ensures that the database can be properly backed up and restored.
- ( ) It determines what data can be stored

Which characteristic does not describe a relation?

Group of answer choices

- (•) A relation can have a multivalued attribute.
- ( ) The location of a tuple in a relation does not affect the interpretation of the attribute values.
- ( ) The name of attribute cannot more than once in a relation.
- ( ) None of the above

Which statement about entity and attribute is correct?

Group of answer choices

- ( ) An entity cannot have composite attributes.
- ( ) An entity is an aspect of the attribute that we want to keep track of.
- ( ) A composite attribute should be depicted in the ERD as an entity.
- (•) An attribute is one aspect of the entity that we want to keep track of.

Given the scenario: A customer can make many purchases, and each purchase is for one or more items. Each purchased item is sold at the current price of the corresponding item sold by a company. The current price of an item changes over time, and each item is supplied by several suppliers.

Which aspect of this scenario can show the line-item pattern?

i. The relationship between customer and purchase
ii. The relationship between purchase and purchased item
iii. The relationship between purchased item and item
iv. The relationship between supplier and item

Group of answer choices

- i and ii
- ii and iii
- (selected) i, ii, iii and iv
- ii, iii and iv

What can an ED diagram be used for?

i. It can determine whether the data requirements are correct.
ii. It documents the data requirements pictorially.
iii. It can be used to communicate with users about the data requirements gathered thus far.
iv. It can help uncover missing data requirements.

Group of answer choices

- ii and iii
- i and iv
- ii, iii and iv
- (selected) i, ii, iii and iv