1.
In the Entity-Relationship model, the degree of a relationship specifies which of the following?

(a) The cardinality ratio of the relationship
(b) The number of integrity constraints required to implement the relationship
(c) The number of attributes that characterize the relationship
(d) The number of entities that participate in the relationship

Correct answer is (d)

Your score on this question is: 10.00

See section 3.2.1, subsection "Entities and Relationships," in the course notes.

2.
In an ER model, which of the following is true about a component attribute?

(a) A component attribute is always atomic.
(b) Component attributes must always be combined by an aggregation operation.
(c) A component attribute can be a composite attribute.
(d) A component attribute always contains other components.

Correct answer is (c)

Your score on this question is: 10.00

3.
In the Entity-Relationship model, properties that characterize entities and relationships are modeled as

(a) attributes
(b) participation constraints
(c) entity types
(d) weak entities

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

4.
What is an identifying owner in an ER model?

(a) The entity upon which a weak entity's existence depends
(b) The relationship that identifies a weak entity's owner
(c) The entity upon which a strong entity's existence depends
(d) The relationship that identifies a strong entity's owner

Correct answer is (a)

Your score on this question is: 10.00

5.
In an ER model, the cardinality ratio of a relationship type is

(a) the number of instances of relationships of that relationship type
(b) the number of entity types involved in that relationship type
(c) the number of relationships of that relationship type in which an entity can participate
(d) the minimum number of entities that can participate in that relationship type

Correct answer is (c)

Your score on this question is: 10.00

6.
Which of the following is true about storage for derived attributes?

(a) Derived attributes must not be stored.
(b) Derived attributes are usually stored because storage improves retrieval performance.
(c) Derived attributes must be stored.
(d) Derived attributes are usually not stored because they can be computed.

Correct answer is (d)

Your score on this question is: 10.00

7.
In an ER model, what is a recursive relationship type?

(a) A never-ending type of relationship
(b) The type of relationship that does not belong anywhere
(c) The type of relationship between entities of one entity type
(d) The relationship type where the related entities are one and the same

Correct answer is (c)

Your score on this question is: 10.00

8.
In EER modeling, generalization is the process of generating

(a) superclasses out of subclasses
(b) subclasses out of superclasses
(c) entities out of attributes

(d) attributes out of entities

Correct answer is (a)

Your score on this question is: 10.00

9.
When mapping from an ER model to a relational model, a strong entity is mapped into a

(a) table
(b) row
(c) column
(d) key

Correct answer is (a)

Your score on this question is: 10.00

10.
Which of the following is true about attributes in a relational model?
Attributes can be multi-valued.
Attributes can be composite.

(a) Both I and II
(b) II only
(c) Neither I nor II
(d) I only

Correct answer is (c)

1.
In an ER model, what is a recursive relationship type?

(a) The relationship type where the related entities are one and the same

(b) The type of relationship that does not belong anywhere
(c) The type of relationship between entities of one entity type
(d) A never-ending type of relationship

Correct answer is (c)

Your score on this question is: 10.00

2.
In an ER model, the cardinality ratio of a relationship type is

(a) the number of relationships of that relationship type in which an entity can participate
(b) the minimum number of entities that can participate in that relationship type
(c) the number of entity types involved in that relationship type
(d) the number of instances of relationships of that relationship type

Correct answer is (a)

Your score on this question is: 10.00

3.
In the Entity-Relationship model, a derived attribute is one

(a) that is composed of multiple atomic attributes
(b) that characterizes a relationship instead of an entity
(c) that may have multiple values simultaneously
(d) whose value can be computed from the values of other attributes

Correct answer is (d)

Your score on this question is: 10.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

4.
In the Entity-Relationship model, properties that characterize entities and relationships are modeled as

(a) entity types
(b) weak entities
(c) attributes
(d) participation constraints

Correct answer is (c)

Your score on this question is: 10.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

5.
Which of the following is true about storage for derived attributes?

(a) Derived attributes must be stored.
(b) Derived attributes are usually stored because storage improves retrieval performance.
(c) Derived attributes must not be stored.
(d) Derived attributes are usually not stored because they can be computed.

Correct answer is (d)

Your score on this question is: 10.00

6.
What is an identifying owner in an ER model?

(a) The relationship that identifies a weak entity's owner
(b) The relationship that identifies a strong entity's owner
(c) The entity upon which a strong entity's existence depends
(d) The entity upon which a weak entity's existence depends

Correct answer is (d)

Your score on this question is: 10.00

7.
In an ER model, which of the following is true about a component attribute?

(a) A component attribute always contains other components.
(b) A component attribute can be a composite attribute.
(c) A component attribute is always atomic.
(d) Component attributes must always be combined by an aggregation operation.

Correct answer is (b)

Your score on this question is: 10.00

8.
In EER modeling, generalization is the process of generating

(a) attributes out of entities
(b) superclasses out of subclasses
(c) subclasses out of superclasses
(d) entities out of attributes

Correct answer is (b)

Your score on this question is: 10.00

9.
When mapping from an ER model to a relational model, a strong entity is mapped into a

(a) key
(b) row
(c) column
(d) table

Correct answer is (d)

Your score on this question is: 10.00

10.
Which of the following is true about attributes in a relational model?
Attributes can be multi-valued.
Attributes can be composite.

(a) I only
(b) II only
(c) Neither I nor II
(d) Both I and II

Correct answer is (c)
1.
Through normalization, update anomalies

(a) can be eliminated
(b) is usually left unchanged
(c) can be maximized
(d) can be minimized but not eliminated

Correct answer is (a)

Your score on this question is: 10.00

2.
Which of the following is a property (are properties) exhibited by good relational schemas?

The use of null values in tuples
The grouping of as many attributes as possible into one main table
The elimination of data redundancy to avoid update anomalies

(a) III only
(b) None
(c) I and II only
(d) II and III only

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.3.1 in the course notes.

3.
Which of the following statements concerning normal forms is true?

(a) A relation that is in second normal form is also in first normal form.
(b) The lower the normal form number, the better the schema design is.
(c) Each normal form contains a state of independent properties, unrelated to other normal forms.
(d) Schemas that are in second normal form are considered the best.

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.3.1 in the course notes.

4.
Consider the following functional dependency.

{A, B} -> {C}
Regarding this dependency, which of the following statements is (are) true?

The values of C are uniquely determined by the values of A.
The values of A are uniquely determined by the values of C.

(a) None
(b) II only
(c) I only
(d) I and II

Correct answer is (a)

Your score on this question is: 0.00

Feedback:

See section 3.3.1, subsection "Functional Dependencies," in the course notes.

5.
Which of the following problems can be caused by data redundancy in a relational schema?

Inefficient use of space
Update anomalies and possible loss of data

Inefficient use of processing time

(a) I and II only
(b) I and III only
(c) I, II, and III
(d) II only

Correct answer is (c)

Your score on this question is: 10.00

Feedback:

See section 3.3.1 in the course notes.

6.
Consider a table with atomic attributes A, B, and C and the following functional dependencies.

A -> B
B -> C
If the primary key of this table is attribute A, then this relation satisfies which of the following normal forms?

First
Second
Third

(a) None
(b) I only
(c) I, II and III
(d) I and II only

Correct answer is (d)

Your score on this question is: 10.00

Feedback:

See section 3.3.2 in the course notes.

7.
For a relation to be in 3NF, it should not contain _____ attribute that is transitively dependent on _____.

(a) a non-primary key, a foreign key
(b) a primary key, a non-primary key
(c) a primary key, a foreign key
(d) a non-primary key, the primary key

Correct answer is (d)

Your score on this question is: 10.00

8.
The FD X -> Y is a full dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) no, added to
(b) no, removed from
(c) at least one, removed from
(d) at least one, added to

Correct answer is (b)

Your score on this question is: 10.00

9.
For a relation to be in 2NF, _____ attribute must be fully functionally dependent on _____.

(a) every non-primary-key, the primary key
(b) every alternate key, the primary key
(c) every non-key, every key
(d) every non-key, at least one key

Correct answer is (a)

Your score on this question is: 10.00

10.
The FD X -> Y is a partial dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) at least one, removed from
(b) at least one, added to
(c) no, added to
(d) no, removed from

Correct answer is (a)

Your score on this question is: 10.00

1.
Through normalization, update anomalies

(a) can be eliminated
(b) is usually left unchanged
(c) can be minimized but not eliminated
(d) can be maximized

Correct answer is (a)

Your score on this question is: 10.00

2.
Consider the following functional dependency.

{A, B} -> {C}
Regarding this dependency, which of the following statements is (are) true?

The values of C are uniquely determined by the values of A.
The values of A are uniquely determined by the values of C.

(a) None
(b) I and II
(c) I only
(d) II only

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.3.1, subsection "Functional Dependencies," in the course notes.

3.
Which of the following is a property (are properties) exhibited by good relational schemas?

The use of null values in tuples
The grouping of as many attributes as possible into one main table
The elimination of data redundancy to avoid update anomalies

(a) III only
(b) None
(c) II and III only
(d) I and II only

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.3.1 in the course notes.

4.
Through normalization, data redundancy

(a) can be eliminated
(b) can be maximized
(c) can be minimized but not eliminated
(d) are usually left unchanged

Correct answer is (a)

Your score on this question is: 10.00

5.
Which of the following statements concerning normal forms is true?

(a) A relation that is in second normal form is also in first normal form.
(b) Each normal form contains a state of independent properties, unrelated to other normal forms.
(c) Schemas that are in second normal form are considered the best.
(d) The lower the normal form number, the better the schema design is.

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

See section 3.3.1 in the course notes.

6.
For a relation to be in 3NF, it should not contain _____ attribute that is transitively dependent on _____.

(a) a primary key, a foreign key
(b) a primary key, a non-primary key
(c) a non-primary key, a foreign key
(d) a non-primary key, the primary key

Correct answer is (d)

Your score on this question is: 10.00

7.
The FD X -> Y is a full dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) no, removed from
(b) at least one, removed from
(c) at least one, added to
(d) no, added to

Correct answer is (a)

Your score on this question is: 10.00

8.
Consider a table with atomic attributes A, B, and C and the following functional dependencies.

A -> B

B -> C
If the primary key of this table is attribute A, then this relation satisfies which of the following normal forms?

First
Second
Third

(a) I, II and III
(b) None
(c) I and II only
(d) I only

Correct answer is (c)

Your score on this question is: 10.00

Feedback:

See section 3.3.2 in the course notes.

9.
For a relation to be in 2NF, _____ attribute must be fully functionally dependent on _____.

(a) every alternate key, the primary key
(b) every non-key, at least one key
(c) every non-key, every key
(d) every non-primary-key, the primary key

Correct answer is (d)

Your score on this question is: 10.00

10.

The FD X -> Y is a partial dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) no, added to
(b) no, removed from
(c) at least one, added to
(d) at least one, removed from

Correct answer is (d)

1.
What is an identifying owner in an ER model?

(a) The entity upon which a weak entity's existence depends
(b) The relationship that identifies a weak entity's owner
(c) The relationship that identifies a strong entity's owner
(d) The entity upon which a strong entity's existence depends

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

2.
In an ER model, the cardinality ratio of a relationship type is

(a) the minimum number of entities that can participate in that relationship type
(b) the number of instances of relationships of that relationship type
(c) the number of entity types involved in that relationship type
(d) the number of relationships of that relationship type in which an entity can participate

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

3.
In the Entity-Relationship model, properties that characterize entities and relationships are modeled as

(a) entity types
(b) participation constraints
(c) weak entities
(d) attributes

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

4.
In an ER model, what is a recursive relationship type?

(a) A never-ending type of relationship
(b) The relationship type where the related entities are one and the same
(c) The type of relationship between entities of one entity type
(d) The type of relationship that does not belong anywhere

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

5.
In the Entity-Relationship model, a derived attribute is one

(a) that characterizes a relationship instead of an entity
(b) that may have multiple values simultaneously
(c) whose value can be computed from the values of other attributes
(d) that is composed of multiple atomic attributes

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

6.
In the Entity-Relationship model, the degree of a relationship specifies which of the following?

(a) The number of attributes that characterize the relationship
(b) The number of entities that participate in the relationship
(c) The cardinality ratio of the relationship
(d) The number of integrity constraints required to implement the relationship

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

Feedback:

See section 3.2.1, subsection "Entities and Relationships," in the course notes.

7.
Which of the following is true about storage for derived attributes?

(a) Derived attributes are usually not stored because they can be computed.
(b) Derived attributes are usually stored because storage improves retrieval performance.
(c) Derived attributes must be stored.
(d) Derived attributes must not be stored.

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

8.
In EER modeling, generalization is the process of generating

(a) superclasses out of subclasses
(b) entities out of attributes
(c) subclasses out of superclasses
(d) attributes out of entities

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

9.
When mapping from an ER model to a relational model, a strong entity is mapped into a

(a) key
(b) table

(c) row
(d) column

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

10.
Which of the following is true about attributes in a relational model?
Attributes can be multi-valued.
Attributes can be composite.

(a) II only
(b) I only
(c) Both I and II
(d) Neither I nor II

You did not answer this question.

Correct answer is (d)

1.
Which of the following is true about storage for derived attributes?

(a) Derived attributes are usually stored because storage improves retrieval performance.
(b) Derived attributes must be stored.
(c) Derived attributes are usually not stored because they can be computed.
(d) Derived attributes must not be stored.

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

2.
In an ER model, the cardinality ratio of a relationship type is

(a) the minimum number of entities that can participate in that relationship type
(b) the number of entity types involved in that relationship type
(c) the number of relationships of that relationship type in which an entity can participate
(d) the number of instances of relationships of that relationship type

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

3.
In the Entity-Relationship model, the degree of a relationship specifies which of the following?

(a) The number of attributes that characterize the relationship
(b) The number of integrity constraints required to implement the relationship
(c) The cardinality ratio of the relationship
(d) The number of entities that participate in the relationship

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

Feedback:

See section 3.2.1, subsection "Entities and Relationships," in the course notes.

4.

In the Entity-Relationship model, properties that characterize entities and relationships are modeled as

(a) weak entities
(b) participation constraints
(c) attributes
(d) entity types

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

Feedback:

See section 3.2.1, subsection "Attributes," in the course notes.

5.

A weak entity type implies a

(a) weak relationship type
(b) relationship with total participation constraint
(c) strong relationship type
(d) relationship with partial participation constraint

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

6.

In an ER model, which of the following is true about a component attribute?

(a) A component attribute can be a composite attribute.
(b) Component attributes must always be combined by an aggregation operation.
(c) A component attribute always contains other components.
(d) A component attribute is always atomic.

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

7.
In the Entity-Relationship model, a derived attribute is one

(a) that characterizes a relationship instead of an entity
(b) that is composed of multiple atomic attributes
(c) whose value can be computed from the values of other attributes
(d) that may have multiple values simultaneously

You did not answer this question.

Correct answer is (c)

1.
Through normalization, update anomalies

(a) is usually left unchanged
(b) can be minimized but not eliminated
(c) can be maximized
(d) can be eliminated

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

2.
Which of the following problems can be caused by data redundancy in a relational schema?

Inefficient use of space
Update anomalies and possible loss of data
Inefficient use of processing time

(a) I and II only
(b) I and III only
(c) II only
(d) I, II, and III

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

3.
Consider the following functional dependency.

{A, B} -> {C}
Regarding this dependency, which of the following statements is (are) true?

The values of C are uniquely determined by the values of A.
The values of A are uniquely determined by the values of C.

(a) I only
(b) I and II

(c) II only
(d) None

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

Feedback:

See section 3.3.1, subsection "Functional Dependencies," in the course notes.

4.
Which of the following is a property (are properties) exhibited by good relational schemas?

The use of null values in tuples
The grouping of as many attributes as possible into one main table
The elimination of data redundancy to avoid update anomalies

(a) III only
(b) II and III only
(c) I and II only
(d) None

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

5.

Which of the following statements concerning normal forms is true?

(a) Schemas that are in second normal form are considered the best.

(b) Each normal form contains a state of independent properties, unrelated to other normal forms.

(c) A relation that is in second normal form is also in first normal form.

(d) The lower the normal form number, the better the schema design is.

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

6.

The FD X -> Y is a partial dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) at least one, added to

(b) at least one, removed from

(c) no, removed from

(d) no, added to

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

7.
For a relation to be in 2NF, _____ attribute must be fully functionally dependent on _____.

(a) every non-primary-key, the primary key
(b) every non-key, at least one key
(c) every non-key, every key
(d) every alternate key, the primary key

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

8.
Consider a table with atomic attributes A, B, and C and the following functional dependencies.

A -> B
B -> C
If the primary key of this table is attribute A, then this relation satisfies which of the following normal forms?

First
Second
Third

(a) I only
(b) None
(c) I and II only
(d) I, II and III

You did not answer this question.

Correct answer is (c)

Your score on this question is: 0.00

Feedback:

See section 3.3.2 in the course notes.

9.
The FD X -> Y is a full dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) no, removed from
(b) at least one, removed from
(c) at least one, added to
(d) no, added to

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

10.
For a relation to be in 3NF, it should not contain _____ attribute that is transitively dependent on _____.

(a) a primary key, a foreign key
(b) a non-primary key, a foreign key
(c) a non-primary key, the primary key
(d) a primary key, a non-primary key

You did not answer this question.

Correct answer is (c)

1.
Which of the following statements concerning normal forms is true?

(a) The lower the normal form number, the better the schema design is.

(b) A relation that is in second normal form is also in first normal form.
(c) Schemas that are in second normal form are considered the best.
(d) Each normal form contains a state of independent properties, unrelated to other normal forms.

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

2.
Consider the following functional dependency.

{A, B} -> {C}
Regarding this dependency, which of the following statements is (are) true?

The values of C are uniquely determined by the values of A.
The values of A are uniquely determined by the values of C.

(a) I only
(b) II only
(c) I and II
(d) None

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

Feedback:

See section 3.3.1, subsection "Functional Dependencies," in the course notes.

3.
Which of the following problems can be caused by data redundancy in a relational schema?

Inefficient use of space
Update anomalies and possible loss of data
Inefficient use of processing time

(a) I, II, and III
(b) I and II only
(c) I and III only
(d) II only

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

4.
Through normalization, update anomalies

(a) can be eliminated
(b) can be maximized
(c) is usually left unchanged
(d) can be minimized but not eliminated

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

5.
Which of the following is a property (are properties) exhibited by good relational schemas?

The use of null values in tuples
The grouping of as many attributes as possible into one main table
The elimination of data redundancy to avoid update anomalies

(a) I and II only
(b) III only
(c) None
(d) II and III only

You did not answer this question.

Correct answer is (b)

Your score on this question is: 0.00

Feedback:

See section 3.3.1 in the course notes.

6.
Consider a table with atomic attributes A, B, and C and the following functional dependencies.

A -> B
B -> C
If the primary key of this table is attribute A, then this relation satisfies which of the following normal forms?

First

Second
Third

(a) I and II only
(b) I only
(c) I, II and III
(d) None

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

Feedback:

See section 3.3.2 in the course notes.

7.
For a relation to be in 3NF, it should not contain _____ attribute that is transitively dependent on _____.

(a) a non-primary key, a foreign key
(b) a primary key, a foreign key
(c) a primary key, a non-primary key
(d) a non-primary key, the primary key

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

8.

The FD X -> Y is a partial dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) at least one, added to
(b) no, removed from
(c) no, added to
(d) at least one, removed from

You did not answer this question.

Correct answer is (d)

Your score on this question is: 0.00

9.
For a relation to be in 2NF, _____ attribute must be fully functionally dependent on _____.

(a) every non-primary-key, the primary key
(b) every alternate key, the primary key
(c) every non-key, every key
(d) every non-key, at least one key

You did not answer this question.

Correct answer is (a)

Your score on this question is: 0.00

10.
The FD X -> Y is a full dependency in a relation R, if there is _____ attribute A that can be _____ X and the dependency still holds.

(a) no, added to
(b) at least one, removed from
(c) at least one, added to

(d) no, removed from

You did not answer this question.

Correct answer is (d)

1.
In an ER model, which of the following is true about a composite attribute?

(a) A composite attribute can have a method attached to it.
(b) A composite attribute cannot be broken into more basic attributes.
(c) A composite attribute can be broken into more basic attributes.
(d) A composite attribute can only be designed by users with special privileges.

Correct answer is (c)

Your score on this question is: 10.00

2.
The term physical data independence refers to the ability to change

(a) the physical layout of the data without changing the external schemas, the conceptual schemas, or the application programs
(b) the data without physically relocating the tables
(c) the conceptual schema without changing the application programs
(d) the application programs without changing the conceptual schema

Correct answer is (a)

Your score on this question is: 10.00

Feedback:

3.1#Three-Schema Architecture

3.
What attributes does a subclass have?

(a) None of the attributes of its superclass
(b) All the attributes of its superclass, and possibly more
(c) Just the attributes from the superclass
(d) A subset of the attributes of its superclass

Correct answer is (b)

Your score on this question is: 10.00

4.
If X -> Y, which of the following would make Y fully dependent on X?

(a) Y is a single attribute
(b) X is a single attribute
(c) X consists of multiple attributes
(d) Y consists of multiple attributes

Correct answer is (b)

Your score on this question is: 10.00

5.
In an ER model, what is the degree of a relationship type?

(a) The validity of the relationship type
(b) The strength of the relationship type
(c) The number of entity types participating in the relationship type
(d) The number of instances of the relationship type

Correct answer is (c)

Your score on this question is: 10.00

6.
Database design typically consists of which of the following phases?

Conceptual design
Logical design
Physical design

(a) II only
(b) I, II, and III
(c) II and III only
(d) I only

Correct answer is (b)

Your score on this question is: 10.00

Feedback:

3.1#Database Design

7.
A relational schema is in first normal form, if the domain of all of its

(a) primary keys are not multi-valued
(b) primary keys and alternate keys are not multi-valued
(c) primary keys are not composite
(d) attributes can take on only atomic values

Correct answer is (d)

Your score on this question is: 10.00

8.
In an ER model, a derived attribute is one whose values

(a) have been derived at some time in the past
(b) can be derived from the values of some other attributes
(c) can be derived from the system tables
(d) can be derived from another table

Correct answer is (b)

Your score on this question is: 10.00

9.
Y is transitively dependent on X, if

(a) X -> Y and A -> Y
(b) X -> A, B and A -> Y
(c) X -> Y and Y -> A
(d) X -> A, B and Y -> A, B

Correct answer is (b)

Your score on this question is: 10.00

10.
Relationships in an ER model are primarily translated to which of the following in a relational model?

(a) relationships
(b) primary keys and foreign keys
(c) three-way tables

(d) dummy relationship tables

Correct answer is (b)

Your score on this question is: 10.00

10. Immediate update policy _____ undo actions, and deferred update policy _____ undo actions.

(a) does not require, does not require
(b) requires, does not require
(c) requires, requires
(d) does not require, requires

Correct answer is (b)