Question 1:

Select the correct answer for the following questions:

Question #	1	2	3	4	5	6	7	8
Answer	c	b	c	d	b	d	c	c

1. _____ **is an attribute or set of attributes within one relation that is the candidate key of another relation.**
   a) Primary key
   b) Super key
   c) Forging key
   d) Secondary key
2. _____ **is the current set of association instances represented in the database.**
   a) Relationship
   b) Relationship set
   c) Relation
   d) State
3. **A weak entity must participate in** _____ **relationship type.**
   a) Strong
   b) Ternary
   c) Identifying
   d) Binary
4. **Which constraint/s may INSERT operation violate?**
   a) Domain constraint
   b) Key constraint
   c) Referential integrity
   d) All the above

3 - 2tuples

5. **In the formal definition of the relational model, given R (A1, A2, A3):**
   a) r(R) can have three 2-tuple
   b) r(R) can have two 3-tuple
   c) r(R) must be three 2-tuple
   d) r(R) must be two 3-tuple

3values

6. **A primary key of a relation can be:**
   a) A super key for that relation
   b) A candidate key for that relation
   c) A foreign key for another relation
   d) All the above

If the value of an attribute is obtained from another attribute it is called:

a) Existence dependency
b) Weak
c) Derived
d) Composite

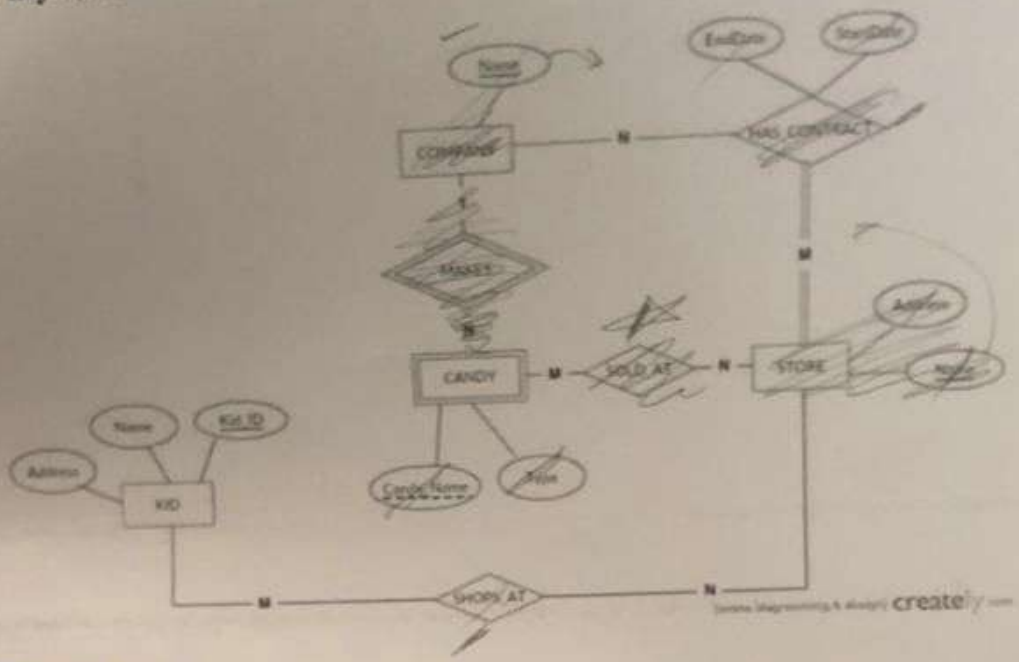
8. **_____ specifies the maximum number of relationship instances that an entity can participate.**

a) Range.
b) Domain.
c) Cardinality.
d) Ceiling.

3
3

Question 3: ER to Relational Model Mapping

Map the ER diagram below into a relational database schema. Identify primary and foreign keys (use arrows to indicate references between relations).



CANDY
CName

CANDY
CandyName | CName | Type

STORE
STName | Address

HASCONTRACT
CName | STName | startDate | endDate

SOLDAT
CandyName | CName | STName

KID
KidID | Name | Address

SHOPS AT
KidID | STName

6. **Which constraint/s may insert operation violate?**
   a) Domain constraint
   b) Key constraint
   c) Referential integrity
   d) All of the above

7. **The relational model represents the database as a collection of _____.**
   a) files
   b) relations
   c) applications
   d) systems

8. **When the value of an attribute A is obtained from the value of an attribute B, then the attribute A is called _____.**
   a) composite
   b) derived
   c) stored
   d) retrieved

Mid1 .

2

Question 1:

Select the correct answer for the following questions:

Question #	1	2	3	4	5	6	7	8
Answer	a	c	a	d	d	d	b	b

1. **A foreign key is**
   a) a key that references a primary key in other relation.
   b) a key that cannot be null.
   c) a key that uniquely identifies different tuples.
   d) all of the above.

2. **A property or characteristic of an entity type that is of interest to the organization is called a(n):**
   a) relationship.
   b) coexisting entity.
   c) attribute.
   d) cross-function.

3. **An entity type whose existence depends on another entity type is called a(n) _____ entity.**
   a) weak
   b) codependent
   c) identifying
   d) strong

4. **An attribute that can be broken down into smaller parts is called a(n) ____ attribute.**
   a) simple
   b) associative
   c) complex
   d) composite

5. **_____ constraint specifies that no two distinct tuples in any state of relational schema can have same values for superkeys.**
   a) Entity-integrity
   b) Domain
   c) Referential-integrity
   d) Key