# 7 Lecture - CS403

# **Important Subjective**

## 1. What is an Entity-Relationship (ER) Data Model?

Answer: The ER Data Model is a conceptual data model used to describe and analyze the data requirements and relationships within a system or organization.

# What is an entity in an ER diagram?

Answer: An entity represents an object or concept in the system or organization being modeled.

# What is a relationship in an ER diagram?

Answer: A relationship represents an association between two or more entities in the system or organization being modeled.

# What is a cardinality constraint in an ER diagram?

Answer: A cardinality constraint specifies the number of instances of one entity that can be related to the number of instances of another entity in a relationship.

#### What is an attribute in an ER diagram?

Answer: An attribute is a characteristic or property of an entity, such as its name, age, or address.

#### What is a weak entity in an ER diagram?

Answer: A weak entity is an entity that cannot be uniquely identified by its own attributes and must be identified by its relationship with another entity.

## What is a primary key in an ER diagram?

Answer: A primary key is a unique identifier for an entity that is used to distinguish it from other entities.

#### What is a foreign key in an ER diagram?

Answer: A foreign key is a reference to the primary key of another entity used to establish a relationship between the two entities.

#### What is a subtype in an ER diagram?

Answer: A subtype is a specialized version of an entity that inherits some of its attributes and relationships.

#### What is a supertype in an ER diagram?

Answer: A supertype is a generalization of one or more entities that have common attributes and relationships.