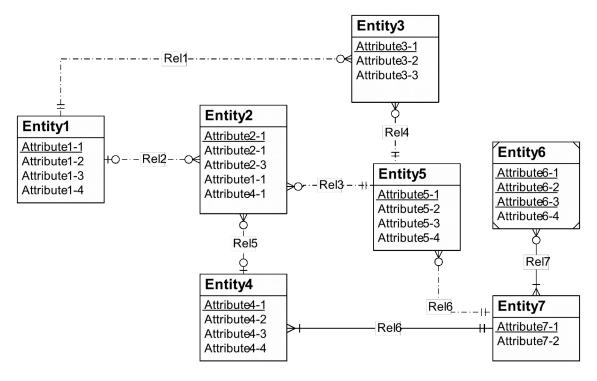
## Module 7 Assignment

## **Question 4**



## Above ERD Diagram has 5 errors:

- 1. Identification Dependency Cardinality Rule Violation (At Rel7).

  Cardinality of Weak Entity should be (1,1)
- 2. Redundant FK(Foreign Key) Rule Violation(At Rel2, Entity 2 is having Attribute1-1 which is primary key of Entity 1.
- 3. Redundant FK(Foreign Key) Rule Violation(At Rel5, Entity 2 is having Attribute4-1 which is primary key of Entity 4.
- **4.** Identifying Relationship Rule Violation. **The relationship between Entity4 and Entity7 is given identifying but none of them is weak entity.**
- 5. Attribute Name Rule Violation: Entity 2 is having 2 attributes with same name Attribute2-1.

## Correction

- 1. Resolution of *Identification Dependency Cardinality*Rule (At Rel7): Cardinality of 'Rel7' near Entity7 is
  made to be (min,max) = (1,1)
- 2. Resolution of Redundant FK(Foreign Key) Rule (At Rel2): Remove the redundant foreign key (Entity2.Attribute1-1)
- 3. Resolution of Redundant FK(Foreign Key) Rule(At Rel5): Remove the redundant foreign key (Entity2.Attribute4-1)
- **4.** Resolution of *Identifying Relationship*Rule(Relationship between **Entity4 and Entity7**)
  :**Make this relationship non-identifying.**
- 5. Resolution to Attribute Name Rule (in Entity2):
  Rename the Attribute2-1 which is not primary key to Attribute2-2.

**Corrected Diagram:** 

