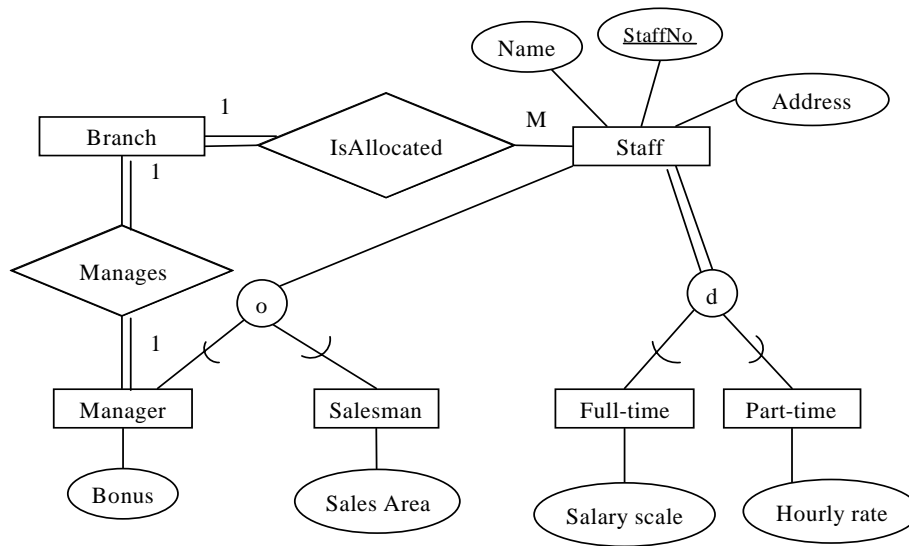


ASSIGNMENT

1. Draw and define the following ER symbols: entity, weak entity, attribute, single-valued, multi-valued attribute.
2. Define the terms:
 - a) Primary key, candidate key.
 - b) UNF, 1NF, 2NF, 3NF, BCNF.
 - c) Functional dependency, full functional dependency, partial dependency, transitive dependency.
3. Explain the following ER diagram.



4. Describe the difference between the Conceptual and the Logical Data Model.
5. Using the relations R and S defined below, perform the following operations: $R - S$, $R \times S$, $R \cup S$.

R		
A	B	C
a	b	c
d	a	f
c	b	d

S		
D	E	F
b	g	a
d	a	f

6. The Costumer_Rental relation has been decomposed using normalization into the following relations:

Customer (Customer_No, CName)

Rental (Customer_No, Property_No, RentStart, RentFinish)

Property_for_rent (Property_No, Paddress, Rent, Owner_No)

Owner (Owner_No, OName)

Explain a general method to re-build the original relation using the four relations above. Write down the steps of a possible procedure.

7.
 - a) Explain what is meant by NORMALISATION when related to database design.
 - b) Explain clearly how FIRST, SECOND, THIRD, BC normal forms are developed from a given model.