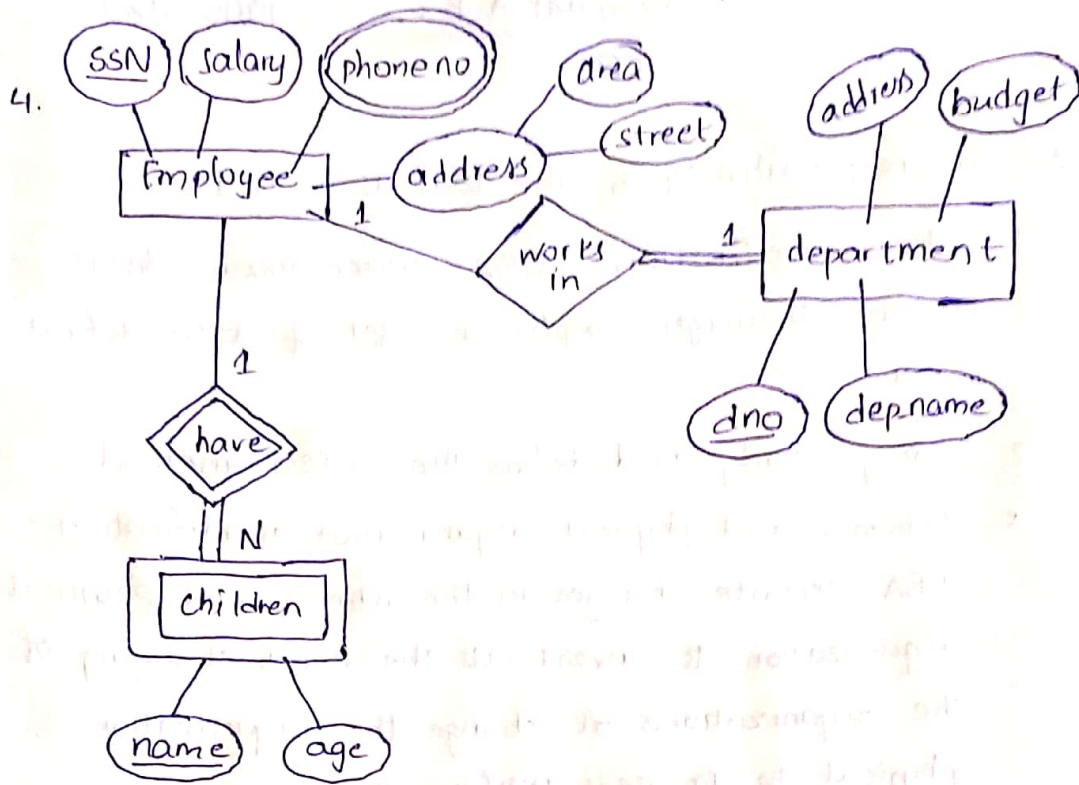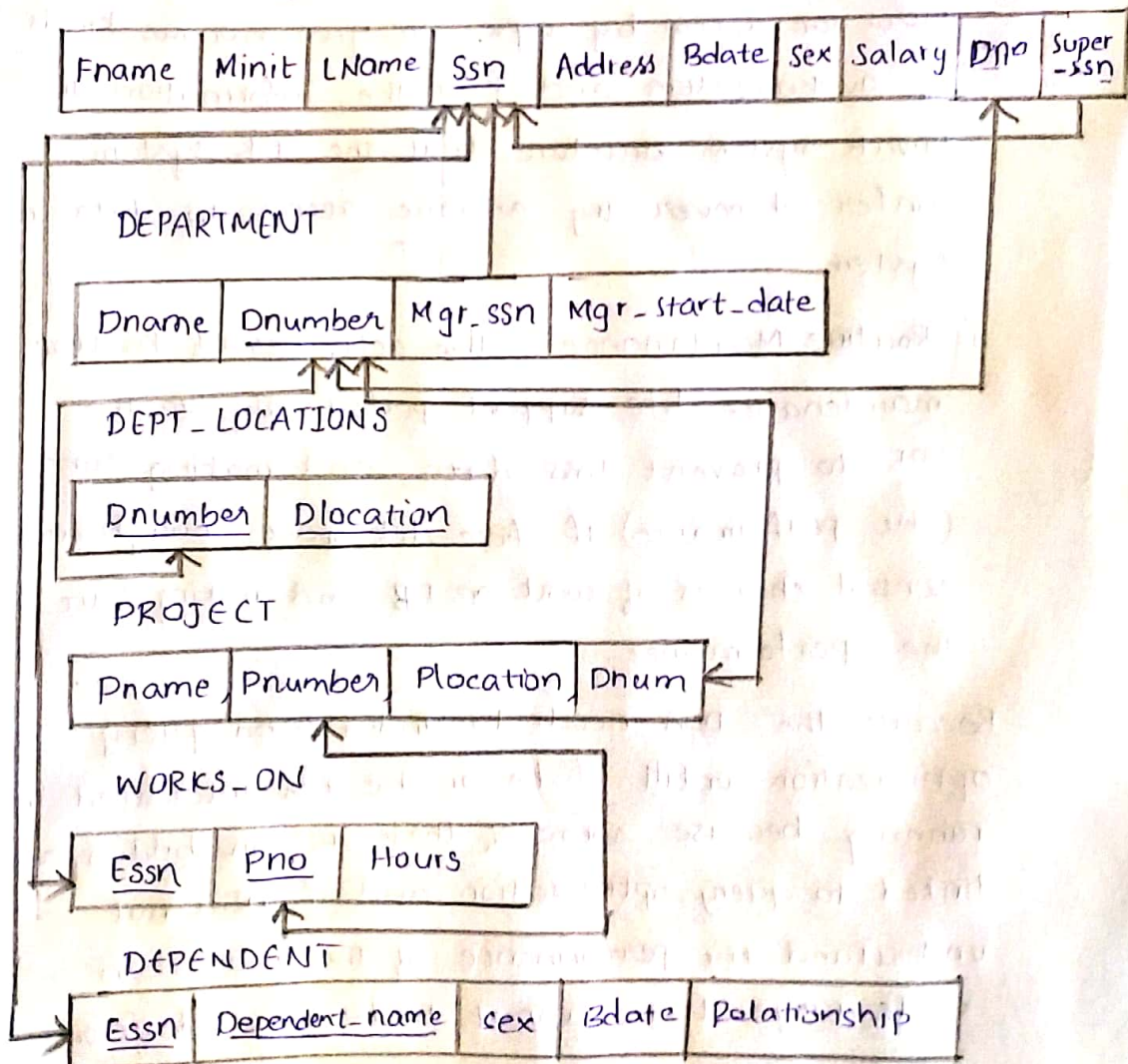2. The responsibility of the DBA is include:

1. Schema Definition: DBA make main database schema through implement set of data definition in DDL

2. storage body and define the access method

3. Schema and physical organization modification: DBA execute changes on the schema and physical organization to invert all the needs changing of the organizations or change the organization physical to progress performance

4. Granting of authorization for data access: The DBA can organize any part of Data base allow to users can access by agree to give various kinds of authorization and keep the information in private system structure that the DB system confer whenever try anyone access to data in system.

5. Routine Maintanance: The activities of Routine maintenance like support periodically up the DB to prevent loss data, and making sure (the performance) if free disk space enough and control chances of work on DB and making sure the performance.
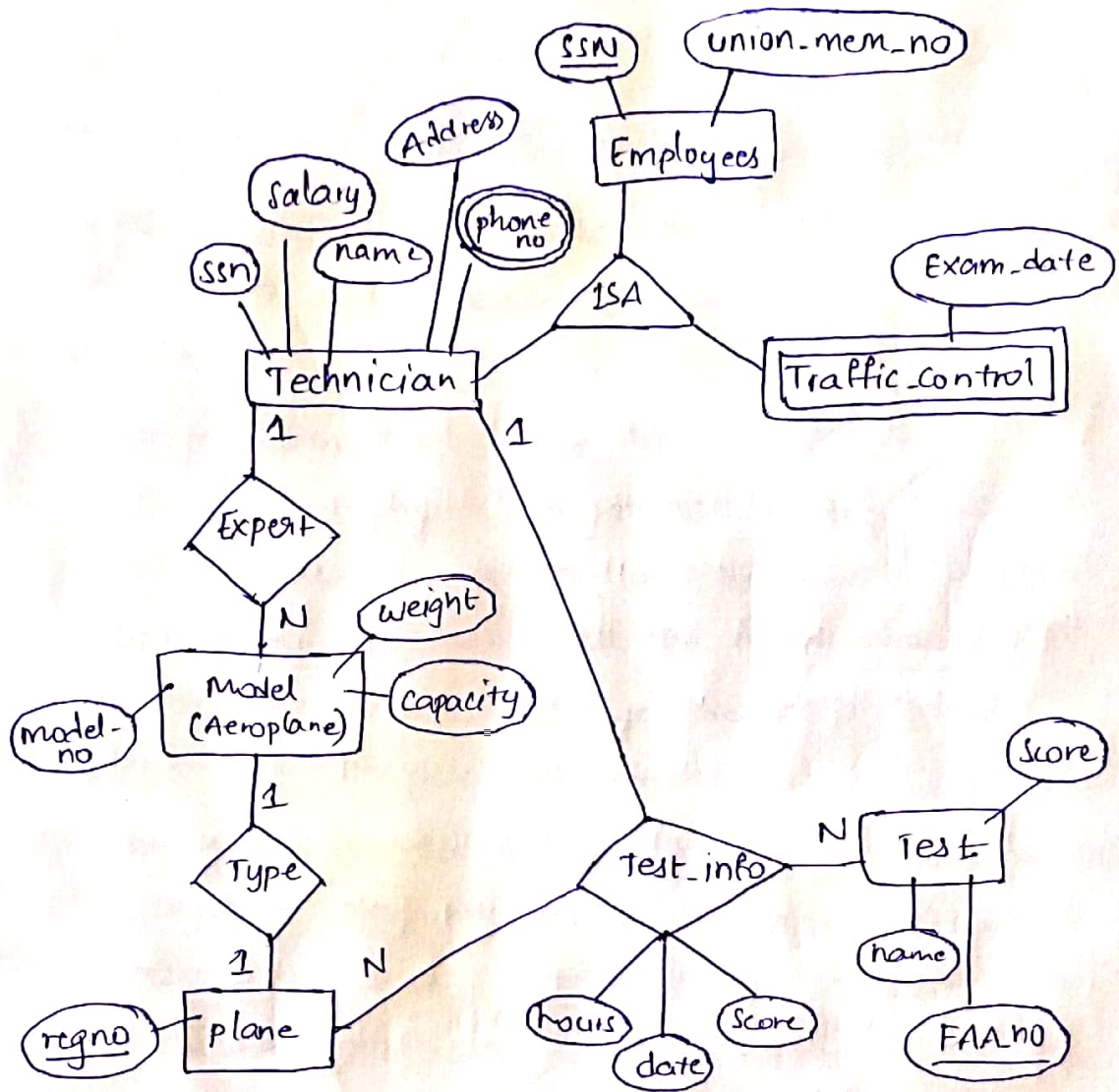
Because the DBA needs to understand query optimization untill if he or she not interested in running because some of these responsibilities are linked to query optimization and if DBA not understand the performance of The queries on wide range then cannot make good desicions.

4.



6. **EMPLOYEE**

| Fname | Minit | LName | Ssn | Address | Bdate | Sex | Salary | Dno | Super-ssn |
|-------|-------|-------|-----|---------|-------|-----|--------|-----|-----------|
|       |       |       |     |         |       |     |        |     |           |

**DEPARTMENT**

| Dname | Dnumber | Mgr_ssn | Mgr_start_date |
|-------|---------|---------|----------------|
|       |         |         |                |

**DEPT_LOCATIONS**

| Dnumber | Dlocation |
|---------|-----------|
|         |           |

**PROJECT**

| Pname | Pnumber | Plocation | Dnum |
|-------|---------|-----------|------|
|       |         |           |      |

**WORKS_ON**

| Essn | Pno | Hours |
|------|-----|-------|
|      |     |       |

**DEPENDENT**

| Essn | Dependent_name | cex | Bdate | Relationship |
|------|----------------|-----|-------|--------------|
|      |                |     |       |              |

5.



Here traffic control is the weak entity as it has no primary key.