Wellness Health Information:

1NF - 1st Normal Form

Patient (PatientNo*, FullName, Bed, WardNo, WardName) Admin (PatientNo*, DrugNo*, Name, Disc, Dosage, Method, Unit, Start, Finish)

Primary key:
Patient(PatientNo) Admin(PatientNo, DrugNo)

2NF - 2nd Normal Form

Patient (PatientNo*, FullName, Bed, WardNo, WardName) Drug (DrugNo*, Name, Disc) Admin (PatientNo*, DrugNo*, Dosage, Method, Unit, Start, Finish)

3NF - Third Normal Form

Transitive Dependencies.

Patient (PatientNo*, FullName, Bed, WardNo) Ward (WardNo*, WardName) Drug(DrugNo*, Name, Disc) Admin (PatientNo*, DrugNo*, Dosage, Method, Unit, Start, Finish)

Fixes insertion anomoly and deletion anomoly...

> *Figure 14.20*

1st Normal Form

  Emp (NIN*, contractNo*, hours, eName, hNo, hloc)

2nd Normal Form
- partial dependencies

Employee (NIN*, eName) Contract (contractNo*, hNo, hloc) Emp (NIN*, contractNo*, hours)

3rd Normal Form
- transitive dependency in contract table

Hotel (hNo*, hLoc) Contract (contractNo*, hNo) Employee (NIN*, eName) EmpContract (NIN*, contractNo*, hours)

  - insertion, update anomolies are now prevented.

Taxi Company

> *14.17*

1st Normal Form

Job (JobID*, JobDateTime, DriverID, DriverName, taxID, clientID, clientName, jobPickUpAddress)

  - no multi valued primary key.

2rd Normal Form

Job (JobID*, JobDateTime, DriverID, DriverName, taxID, clientID, clientName, jobPickUpAddress)

3rd Normal Form

Driver (driverID*, DriverName,taxID) Client (clientID*, clientName) Job (JobID*, JobDateTime, driverID, clientID, address)

> *DriverID and client Id are Forign keys in Job table.*

- Insertion Anomoly is Fixed
- Update Anomoly is Fixed; client remains in table after cancallation rather than getting deleted.

> *15.9 Question A*

multivalued dependencies exist. 4th Normal Form:

> *15.12 question A*

How to put it in 5th Normal Form?

- makes three tables:
  - one for hospitalName & supplierNo
  - one for hospital Name and itemDescription
  - one for itemDescription & supplierNo