Name : Ali Hassaan Mughal Reg No: 173627

Q1:

1. **Relational Schema in given in 3NF**

R1(Shipment ID,Origin, Destination,Ship No,Shipment Date,Expected Date)

R2(Ship No, Captain ID)

R3(Shipment ID,Item No,Quantity,Total Weight)

R4(Item No,Description,Weight)

R5(Captain ID, Captain Name)

1. **The Relation is in Non Normal Form. As all columns do not have atomic attributes so the Relation is not in Normal Form.**
2. **3NF Form:**

R1(Shipment ID,Origin, Destination,Ship No,Shipment Date,Expected Date)

R2(Ship No, Captain ID)

R3(Shipment ID,Item No,Quantity,Total Weight)

R4(Item No,Description,Weight)

R5(Captain ID, Captain Name)

**Q2:**

**a. Relational Schema we Drew is in 3NF**

**R1(Patient ID,Patient Name)**

**R2(Prescription\_No,Description,Date,Total)**

**R3(Patient\_ID,Prescription\_No)**

**R4(Prescription\_No,Drug ID,Quantity,Cost)**

**R5(Drug ID,Drug Name)**

**b. The Relation is in 1st Normal Form as all the columns have atomic and single value.**

**c. R1(Patient ID,Patient Name)**

**R2(Prescription\_No,Description,Date,Total)**

**R3(Patient\_ID,Prescription\_No)**

**R4(Prescription\_No,Drug ID,Quantity,Cost)**

**R5(Drug ID,Drug Name)**