**1. Objectives**

a) To prepare Conceptual Design using ER Diagram

b) Prepare the relations

c) Normalize the relations up to 3NF

**2. Pre-requisites**

a) ER Diagram Concepts

b) Normal forms up to 3NF

c) Relational database concepts

**3. Skills/concepts**

ER Diagrams, Normalization

**4. Duration in hours**

5 hours

**5. Scenario set up**

There are many insurance companies operating both in private and public sectors. Those who purchase the policies have to pay a fixed amount as premium regularly as per the mode of payment agreed upon with the company at the time of securing a policy. As a matter of courtesy, the insurance companies send a reminder for payment of premium. The policy holder can pay the amount to the company by producing the demand notice. The branch/main office of the insurance company issues a cash receipt for the amount received.

The cash receipt to contain the details as follows:

Receipt No, Name of the policy holder, Policy number, Agent’ code, Mode of payment, paid for which period, amount of premium paid, date of receipt and signature of the receiving clerk.

A particular insurance company wants to issue the cash receipt over computer based on the particulars on the demand notice (reminder). They need a software for this purpose only. Receipt numbers to be generated by the system serially.

**Functional Specifications :**

**FS01 :** Payment of premium based on the demand notice (reminder) by the policy holder or his representative at the office of the insurance company to their cashier/clerk.

**FS02:** The receiving clerk/cashier of the insurance company to do the data entry based on the particulars available on the reminder and print the cash receipt.

**FS03:** On the premium collected, 3% is calculated as commission payable to the agent and the same is not to be reflected in the cash receipt but should be saved in the database.

**FS04 :** Data entry required

Name of the policy holder

Policy no

Agent’ code

Mode of payment

Period for which paid

Amount paid

Agents’ commission

**6. Deliverables**

1) ER-diagram

2) Normalized tables.

**7. References**

http://hstslc007/eltplearning/RDBMSConcepts /index.html

*Fundamentals of database systems by Elmasri & Navathe*

*An introduction to DBMS by C.J.Date*

*Database management systems by Korth*