**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**

The insurance companies operating in our country are offering different insurance policies for different target groups. These policies are mostly based on social security concepts. In a normal life insurance policy, the policy amount may be received by the insured or his nominee/legal heirs according the terms of the policy. There are certain groups of people, who are interested in the insurance schemes, but they need a regular income after a certain period for their living. While, during the policy serving period or regular income deriving period, he dies a lump sum has to be paid to his/her nominee or legal heirs.

A private insurance company by name ABC Ltd has come out with such a scheme. The salient features of the scheme are as follows.

The minimum period of the policy should be 8 years and maximum 40 yrs. The premium payable is 70% of per annum policy amount (Policy amount/term)for one year. The premium can be paid monthly or quarterly or half-yearly or annually. The insured who opts for half-yearly or annual premium will be given a discount of 1.00% of the normal premium payable at monthly rates. Further the insured gets a additional discount of 0.25% for each additional policy year beyond 9 years (more than 9 yrs). After completion of the policy term, the insured will get monthly interest @ 8% p.a. on the total sum insured. Now the company wants a chart for an insured amount of Rs.1,00,000/- ,(being the minimum policy amount and in multiples of Rs.50,000/- thereafter) the premium payable for 8 yrs to 10 yrs with monthly interest payable on Rs.50,000/- of the insured amount, after the term is over.

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| --- | --- | --- | --- | --- | --- | --- |
| **Table for an insured amount of Rs.1,00,000/-**  **TERM -------🡪** 8 years 9 years 10 years Mthly income  **MODE** Premium Premium Premium payable on  | Rs. Rs. Rs. Rs.50,000/-  V | | | | | | |
| MONTHLY |  |  |  |  |
| QUARTERLY |  |  |  |  |
| H-YEARLY |  |  |  |  |
| ANNUALLY |  |  |  |  |

**Assumptions :**  The present task entrusted is to generate the above chart only through a software as per the details of the scheme provided.

**Functional Specifications :**

**FS01 :** Feeding of data and generation of the chart.

**FS02 :** Data entry required

Term (8 yrs/ 9 yrs/ 10 yrs)

Mode of payment (monthly/quarterly/half-yearly/annually)

**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*