**CSE 304**

**Practice for Entity Relationship Modeling for Section B2**

**Roll Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_**

**Real Estate Property Management System**

Real estate property database contains information regarding apartments and commercial complexes developed by real estate industries. Each property is identified by an id and is described by type, location and address. Based on the type, the property may be apartment building, commercial building or both commercial+apartment building.

A Real Estate Company can have many properties of different types and only commercial properties can be developed by joint venture of many companies. Each company must have an id, trade name, license no, corporate office address and contact address. An apartment building has many flats. Each flat has an id and is described by type, area, price and floor number. Each apartment building contains an apartment id, apartment location, no of units and names of staffs who are in charge of maintenance. A commercial building has many shops. Each shop has a shop id, area, facing (North, south etc. ), floor number, price, and facilities. The information regarding commercial + apartment building is maintained as per above i.e., the commercial part is maintained as commercial rule and apartment is maintained as apartment rule.

Owner of the property is a customer who purchases a property (apartment, commercial or both) from the company. Each owner must have an owner id, name, date of purchase, total paid amount and contact number. An owner must have one or more than one property and any property may or may not have an owner. There are maintenance teams of different types e.g., gas, electricity and air condition. You have to keep record of maintenance works about who has done the work under whose supervision for the complain made by which owner at which property. Among the owners, a committee is formed for a period of two years. Each committee has a president, a secretary and 7 members.

Task 1: Find all tentative Entity sets along-with the attributes

Task 2: Find all tentative relationship sets

Task 3: Draw Entity-Relationship Diagram (ERD) for the given Real Estate Property Management System.

Task 4: Transform the ERD into relational schems

Task 5: Write DDL for the relational schema