

School/ Department: Computer Science and Engineering

Class: B Tech CSE Jan – May 2025

**Section:** 

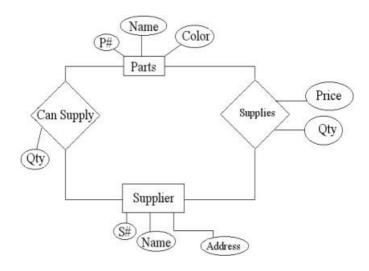
**Subject Name: DBMS** 

**Subject Code: CSL214** 

**Faculty Name:** 

Q1 Design a generalization-specialization hierarchy for a motor-vehicle sales company. The company sells motorcycles which have an engine number and cost; cars which have a chassis number, an engine number, seating capacity and cost; trucks which have chassis number, an engine number and cost.

Q2 Map the following ER diagram to a relational database. Give the relation names and attributes in them. Also mention the primary key and foreign keys if any for each table.



Q3 Supreme Products manufactures products like pressure cookers, cookware, water purifiers, food processors etc. The company markets its products to wholesalers all over the country and dealers sell them to customer. The company has five regional offices and many salespersons are attached to regional offices. Salespersons contact dealers and explain about products, incentives offered, training programs for wholesalers and demo for customers etc. Dealers place orders with the salespersons attached with the regional office of their location. After receiving goods, they make payments, which may be in installments. Company would like to develop a system to monitor sales of different products, performance of salespersons and orders from wholesalers.

## Do the following:

- (i) Identify entities, attribute and relationships giving functionalities and draw E-R diagram for the system.
- (ii) Convert this to relational tables explaining logic involved.