SOMAIYA
VIDYAVIHAR UNIVERSITY

	Semester: January 2023 – May 2023		
Maximum Marks:30	Examination: In-Semester Examination Duration :1 Hr 15Min		
Programme code: 01 Programme: B. Tech. (Computer Engineering)		Class: SY	Semester: IV(SVU 2020)
Name of the Constituent College: K. J. Somaiya College of Engineering		Name of the department: COMP	
Course Code: 116U01C403	Name of the Course: Relational Data Base Management Systems		

Question No.		Max. Marks	CO Mapped	BT Level
Q1	Solve **any TWO out of THREE** a) Write role of a database administrator for e-commerce website. b) Draw and explain basic symbols used in Extended Entity Relationship Diagram c) Explain any two integrity constraints.	10	CO1, CO2	3(AP) 2(UN) 2(UN)

Q2	Consider the employee database:
	
	Employee(Employee_name, Employee_id, street, city)
	Works(Work_id,employee_name,company_name, salary)
	Company(Company_id,company_name,city)
	Manages(manager_id,employee_name)
	
	The primary keys are underlined
	
	Give an expression in SQL for each of the following queries (**Any FIVE out of SEVEN**)
	
	  i) Find the name and cities of the residents of ALL employees who work for the First Bank corporation
	  ii) Find the names, street address, cities of residents of ALL employees of First Bank Corporation who earn more than 10000.
	  iii) Find all employees in the database who earn more than each employee of Small Bank Corporation.
	  iv) Assume that the companies may be located in several cities. Find ALL companies located in every city in which Small Bank Corporation is located.
	  v) Find those companies whose employees earn a higher salary ,on average, than the average salary at First Bank Corporation
	  vi) Find the companies that has the most employees
	  vii) Find ALL employees in the database who don't work for First Bank Corporation
		10	CO2	3 (AP)

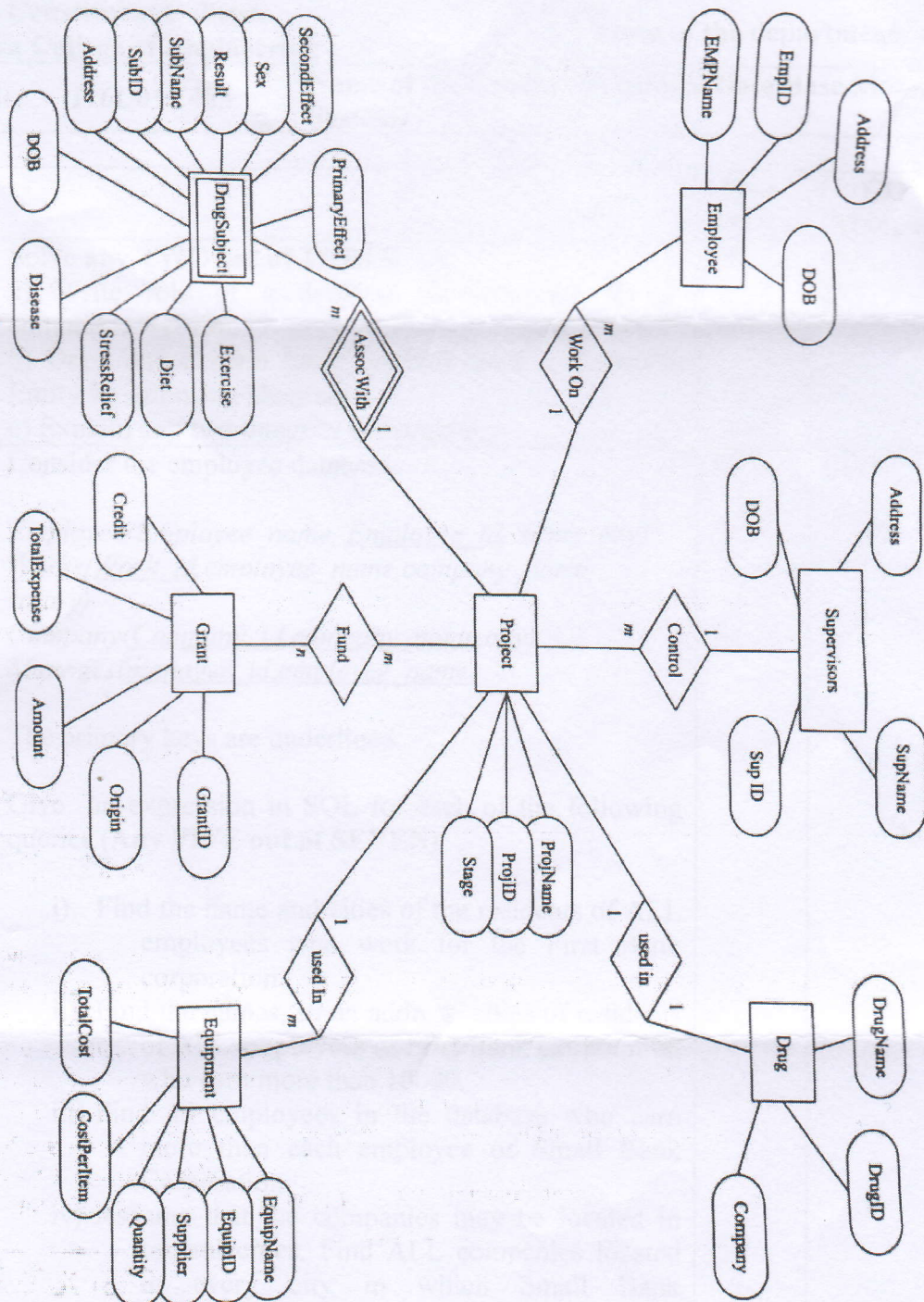| Q 3	For the ER diagram shown below Create various relations representing appropriate relationships among them. Assume suitable data types and constraints (ANY FIVE relations).	10	CO2	3 (AP)

Figure 3.23