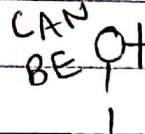
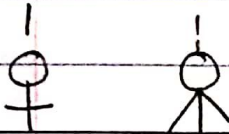


Q1

MANAGES

EMPLOYEE

-----



DEPT-MANAGER	
PK	<u>DEPT-MANAGER-ID</u>
FK	EMP-ID

H - 1 MANAGES

EMPLOYEE	
PK	<u>EMP-ID</u>
	EMP-NAME
	START-DATE
	MANAGER-ID
FK	DEPT-ID



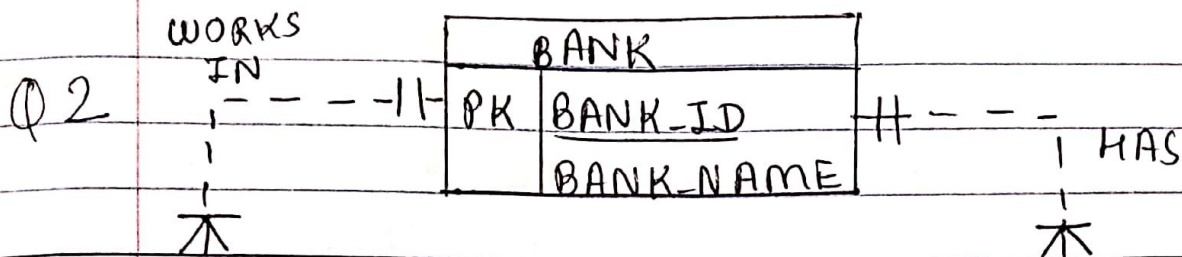
HAS - - - H

DEPARTMENT	
PK	<u>DEPT-ID</u>
	DEPT-NAME
	DEPT-LOCATION
FK	DEPT-MANAGER-ID

WORKS-ON	
PK, FK1	<u>EMP-ID</u>
PK, FK2	<u>P-ID</u>
	HOURS-WORKED

INCHARGE OF

PROJECT	
PK	<u>P-ID</u>
	PROJECT-NAME
	PROJECT-DURATION
FK	DEPT-ID

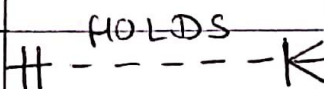


EMPLOYEE	
PK	<u>EMP_ID</u>
	EMP_NAME
	EMP_DOB
	EMP_CONTACT
FK	BANK_ID

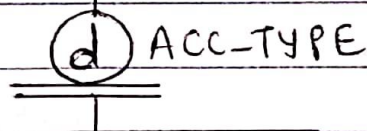
BRANCH	
PK	<u>BRANCH_ID</u>
	BRANCH-ADDRESS
FK	BANK_ID

ACCOUNT	
PK	<u>AC_NO</u>
	BALANCE
	ACC-TYPE
FK	BRANCH_ID
FK	CUST_ID

CUSTOMER	
PK	<u>CUST_ID</u>
	CUST-NAME
	CUST-DOB
	CUST_SSN
	CUST-TELEPHONE
	CUST-ADDRESS



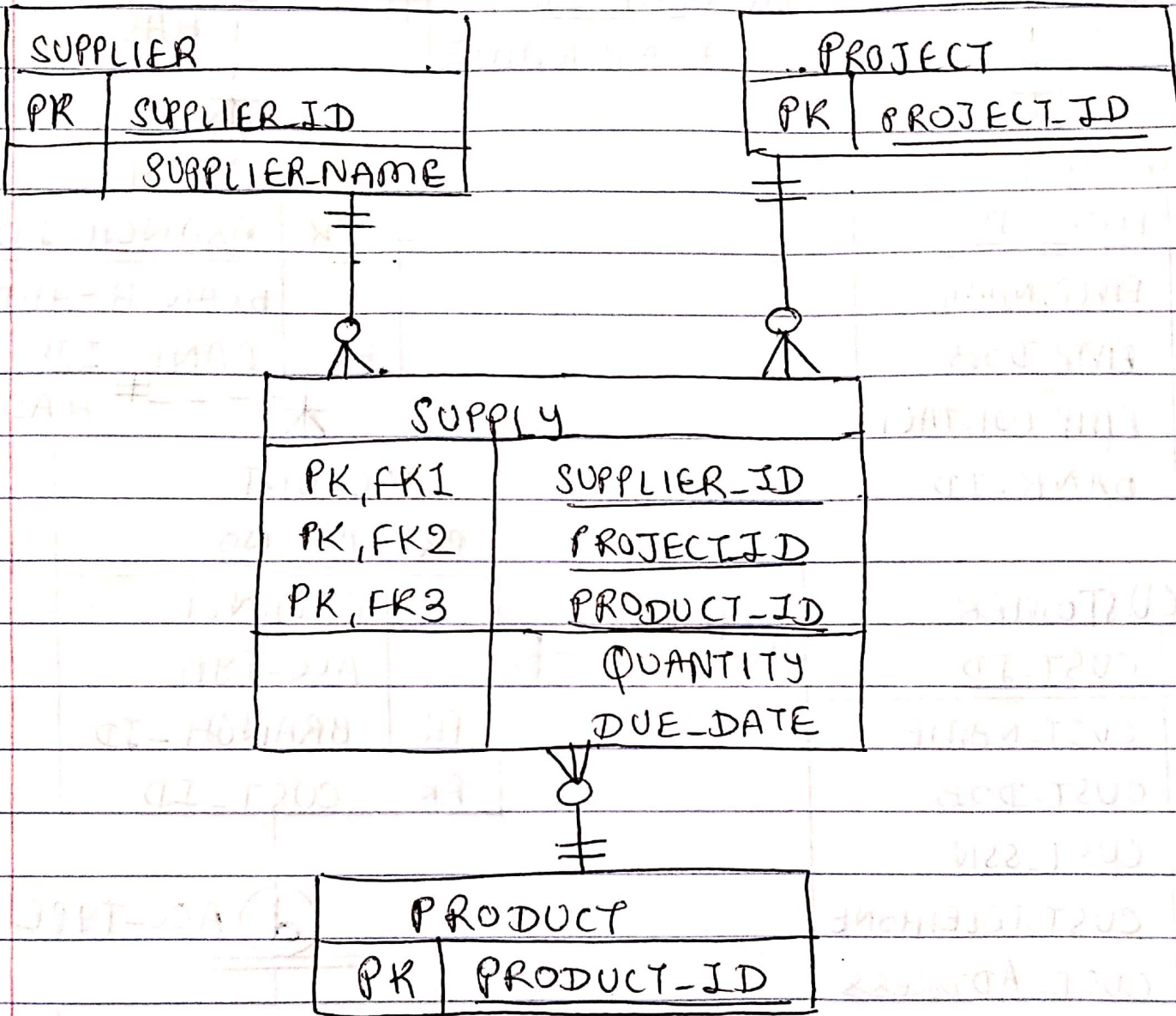
ACCOUNT	
PK	<u>AC_NO</u>
	BALANCE
	ACC-TYPE
FK	BRANCH_ID
FK	CUST_ID



SAVINGS	
PK, FK1	<u>AC_NO</u>
	INTEREST RATE

CHECKING	
PK, FK1	<u>AC_NO</u>
	OVERDRAFT-AMT

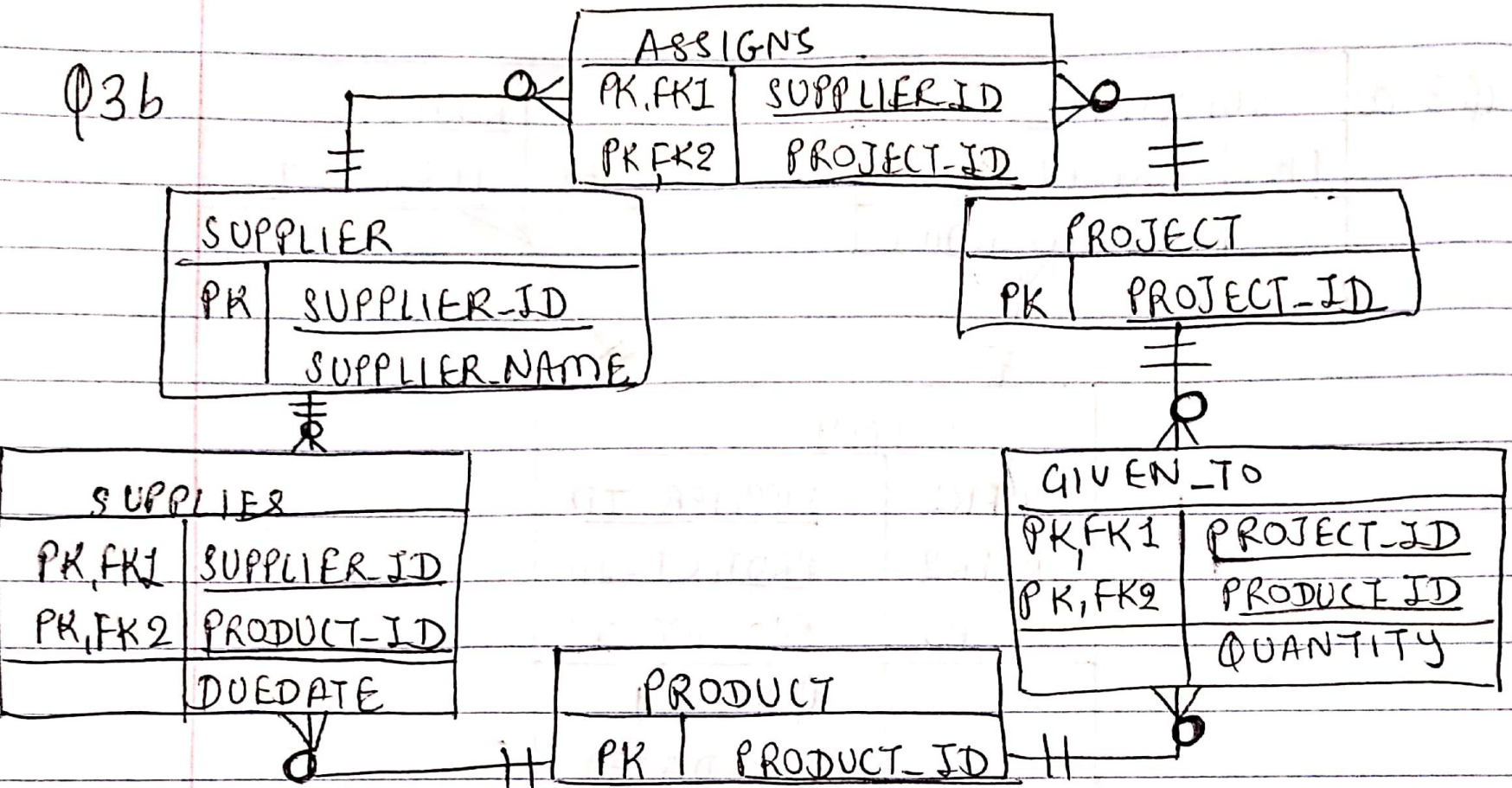
3a



Ternary Relationship



Q36



Binary Relationship

Q3c In ternary relationship, supply table will have

SUPPLIER_ID	PROJECT_ID	PRODUCT_ID	QUANTITY	DUE DATE
S1	P1	Pr1	5	2/5
S2	P2	Pr2	4	2/4
S2	P1	Pr1	4	2/5

but when we break the above relationship to binary, we get multiple tables

SUPPLIER_ID	PRODUCT_ID	DUE DATE	PROJECT_ID	PRODUCT_ID	QUANTITY
S1	Pr1	2/5	P1	Pr1	9
S2	Pr1	2/5	P2	Pr2	4
S2	P2	2/4			

①

②

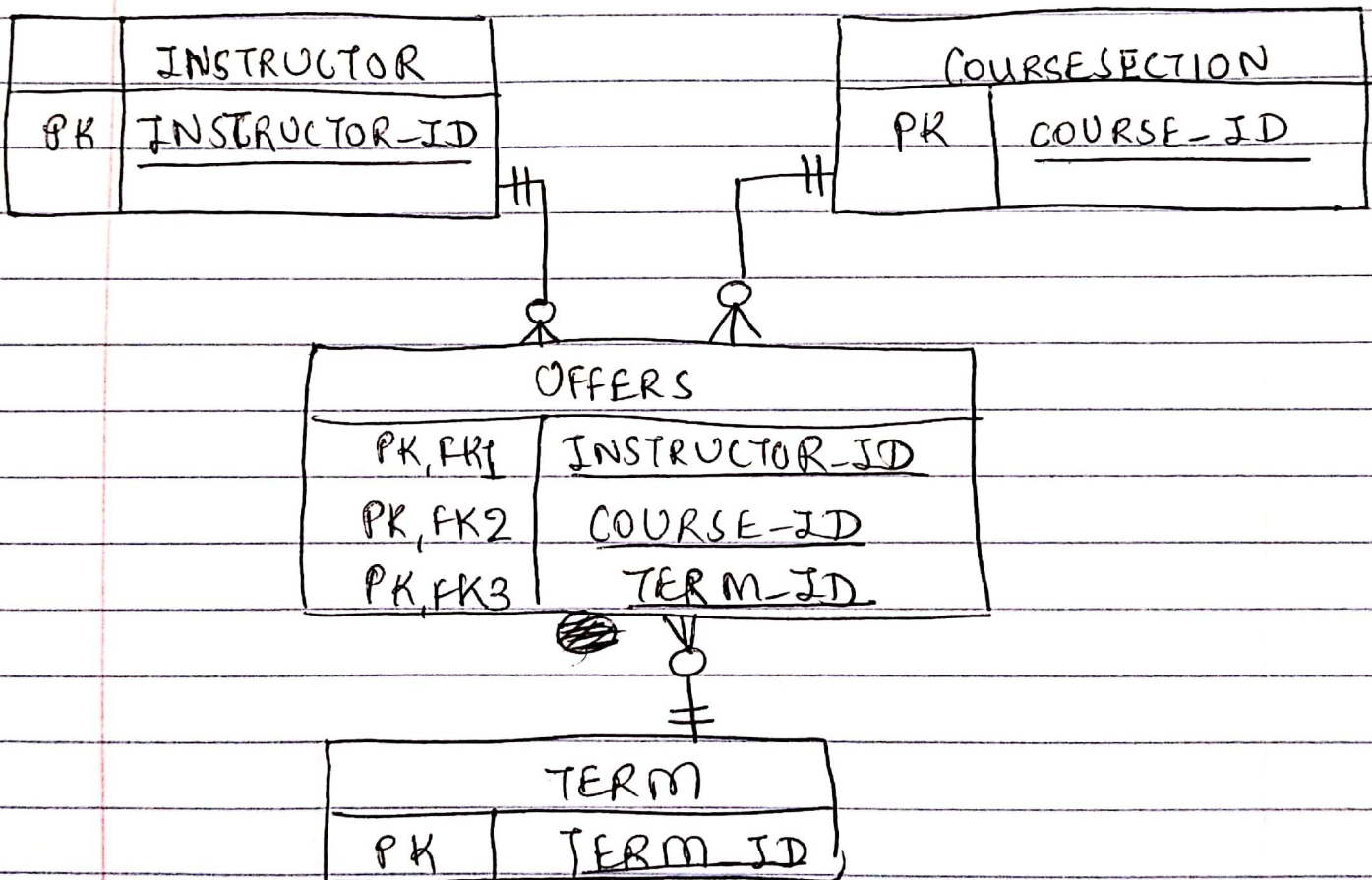
SUPPLIER_ID	PROJECT_ID
S1	P1
S2	P1
S2	P2

③

As per the above tables for ② Pr1 has 9 units for P1 but which supplier provided that is not known but which supplier S1 or S2 provided that cannot be known in binary relationship. This information

is lost. As <sup>we</sup> cannot know the data involved between all three entities when broken down in binary relationship.

Q4



Ternary Relationship