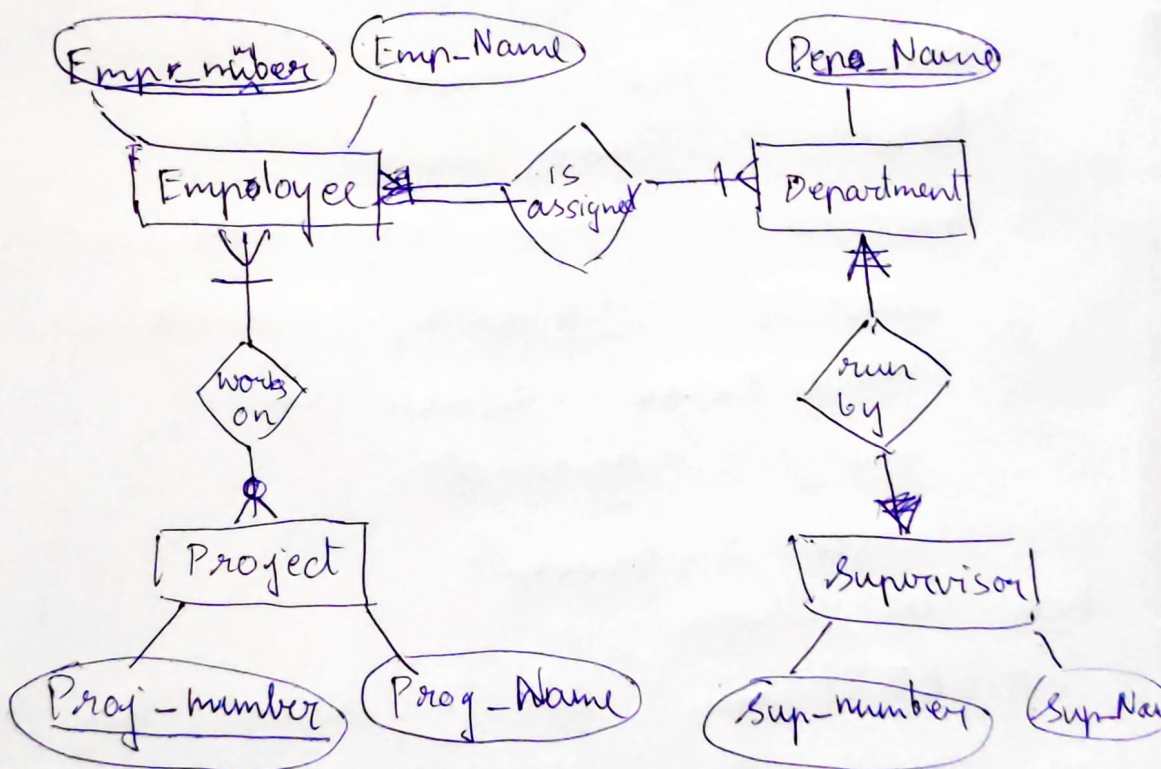


DBMS - Mock Test  
Part - B

CB.EN.V4.CSE18369

- 1) Entities are Department, Employee, Supervisor, Project  
Relations are 1) Run by between Department and supervisor  
2) Is assigned between Department and Employee  
3) Works on between Project and employee



2) Given:

DOB  $\rightarrow$  Age

Age  $\rightarrow$  Elig

Name  $\rightarrow$  RollNo

CourseNo  $\rightarrow$  CourseName

~~is~~

Closure

DOB = { Age, Elig, DOB }

Age = { Elig, Age }

Name = { RollNo, Name }

RollNo = { Name, RollNo }

CourseNo = { CourseName, CourseNo }

CourseName = { Instructor, CourseNo }

CourseNo = { CourseName }

Instr = { Instructor }

Grade = { Grade }

We can take

{ DOB, Name } as a candidate key as  
closure of it gives us all the req. like  
{ RollNo, Name, DOB, Age }

But we can take { DOB, RollNo } as well

We have partial dependency with DOB  $\rightarrow$  Age  
and Age is not primary attribute, so it's in  
INF as it fails 2NF so not 3NF, BCNF (2) None occurred