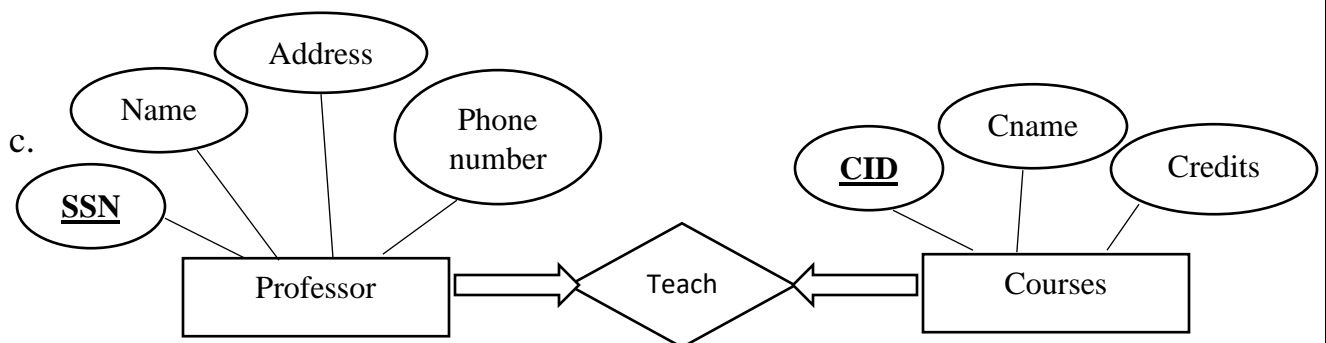
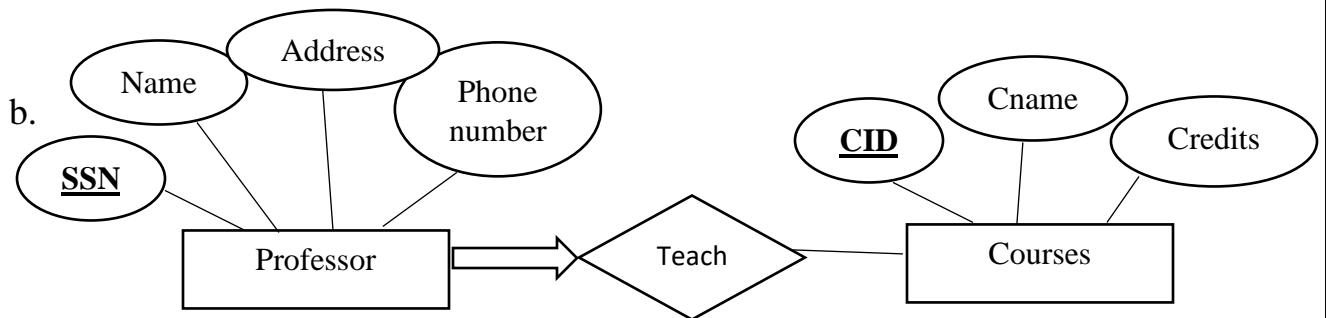
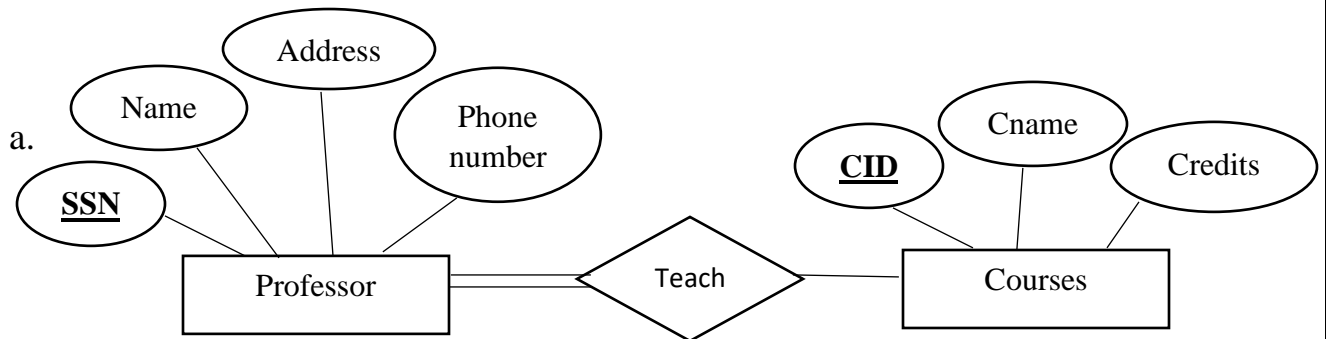
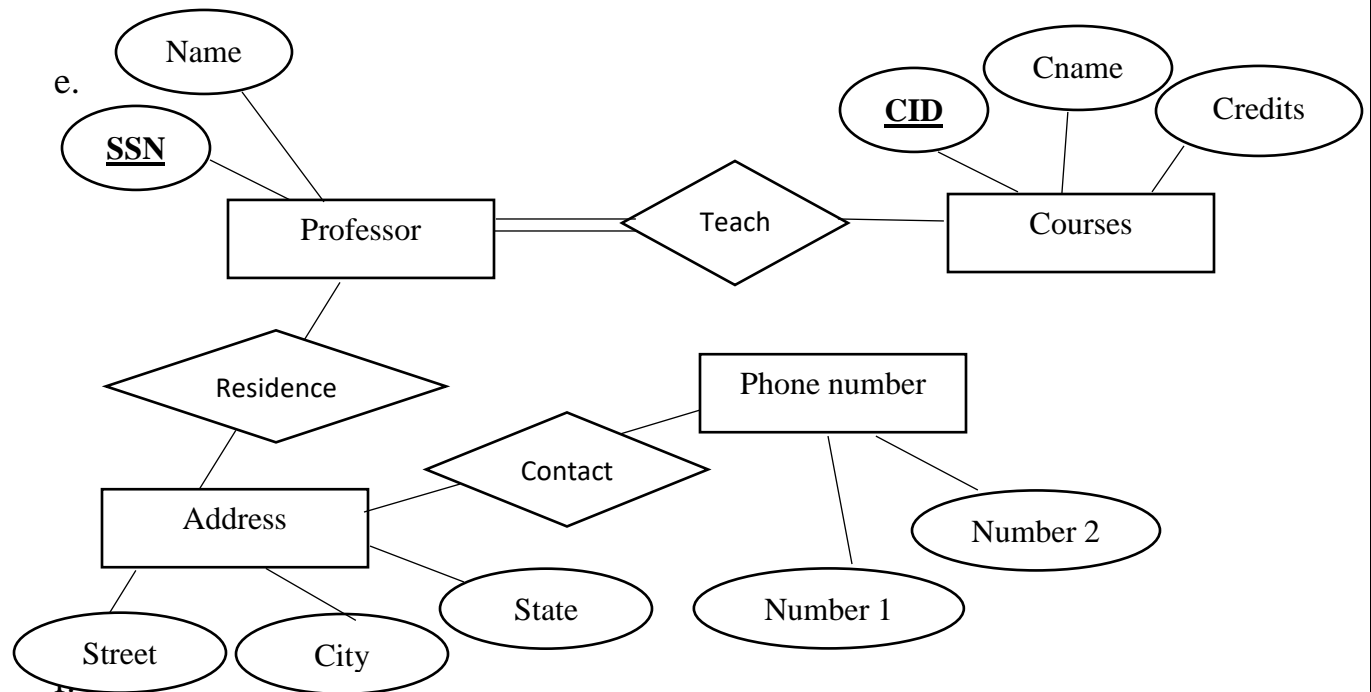
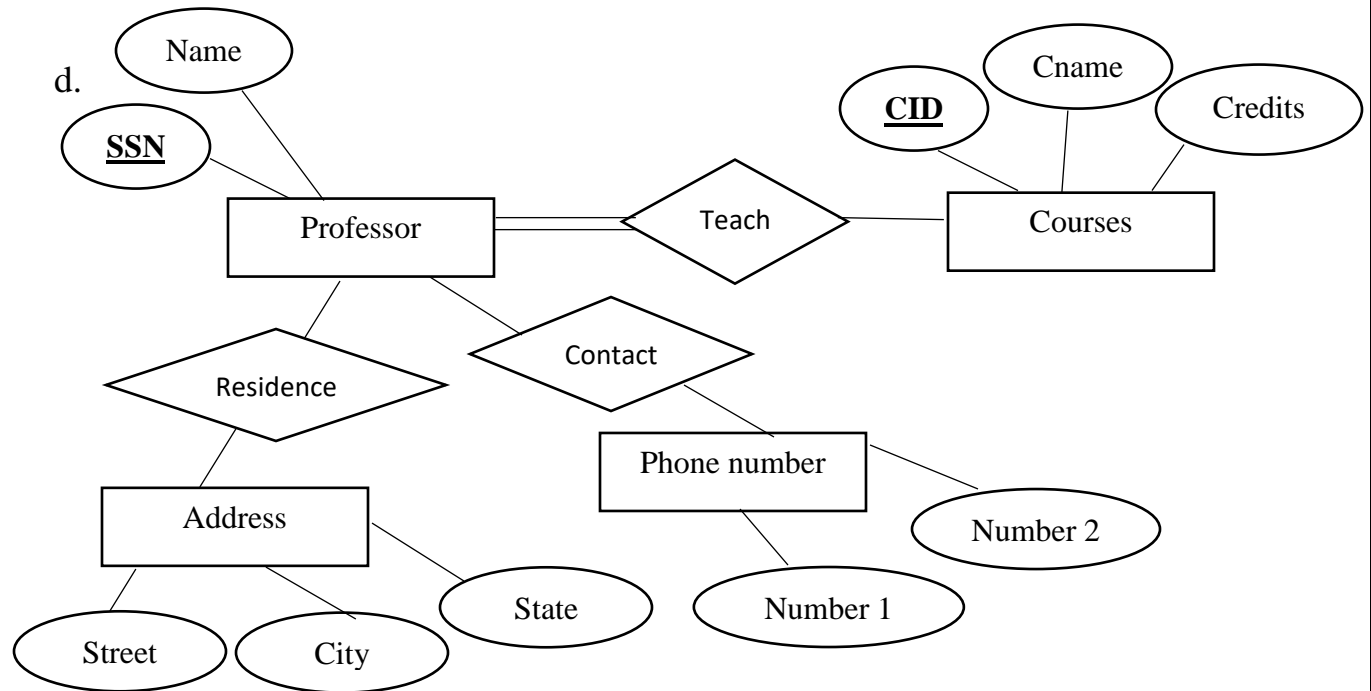


# CS630 HW3

## Q1





## Q2

- a. Here there will be two cases:
  - a = 10 and b can be NULL or can be any integer.
  - b = 20 and a can be NULL or can be any integer.
- b. Here there can only be one tuple. The set must contain exactly the tuple (10, 20).
- c. Here the set can be any tuple (a, b) where a can be any integer but not NULL and b can be any integer or it can also be NULL.
- d. Here the tuple (a, b) such that a and b both of them cannot be NULL but can be integers.

### Q3

- a. CREATE VIEW ManagerSummary (DeptName, MgrId, MgrName, MgrSalary, EmpCount) AS  
SELECT dname, managerid, E.ename, E.salary, COUNT(e.eid)  
FROM Employee E, Works W, Department D  
WHERE D.managerid = E.eid and D.did = W.did and W.eid = E.eid  
GROUP BY D.did, D.dname, D.managerid, E.ename, E.salary;
- b. SELECT DISTINCT M.MgrSalary  
FROM ManagerSummary M  
WHERE M.DeptName = 'Sales';
- c. SELECT M.MgrName  
FROM ManagerSummary M  
WHERE M.EmpCount = (SELECT MAX(M1.EmpCount) FROM  
ManagerSummary M1);