### **Quiz No.2**

Design ERD for each case study given below. Each case study carries equal [10] marks. The ERD you design will be evaluated against three things i.e. Entity, Relationship and Cardinality.

### Case Study No.1 [10 marks]

Consider the following set of requirements for a COMPANY database that is used to keep track of its employees, departments and projects.

- The company stores information about currently working employees. The information includes employee code, name, gender, date of birth, salary, hire date, address and phone number. Each employee works for a department on a particular project for a specified number of hours.
- The information about department includes department number and name. Each department controls
  some projects running in the company. Each department is managed by a particular employee who
  becomes the manager for that department. This employee also supervises all the other employees
  working in that department.
- The project's information includes project number, name, budget and description.
- An employee can work for only one department; however, a department can have any number of employees. A department is managed by only one manager and a manager can manage only one department. A department can control any number of projects; however, one project can be handled by only one department. Any number of employees can work on any number of projects.

# Case Study No.2 [10 marks]

Consider the following set of requirements for a hospital database that is used to keep track of operation theaters where patients are passed through minor or major surgeries performed by doctors and supporting nurses.

- A patient can pass through one or many operations but each operation is performed on one patient only.
- An operation must be performed by one or many doctors.
- One doctor may or may not perform any operations.
- An operation must be supported by one or many nurses.
- A nurse may or may not support any operations. The information recorded by hospital are
- patient no, name, gender, age and address of a patient
- doctor id, name, gender and specialization of a doctor
- nurse id, name and birthdate of a nurse
- operation no, date

#### **Submission instruction:**

Use any tool to draw ERD. Handmade ERD will not be accepted. Submit hardcopy on Monday before 12pm.

Program: Section:	BSE – 3B (Spring 2017)	Obtained Marks	
Course Code:	CSC271	Total	20
Course Title:	Database Systems 4 (3+1)	Marks	20

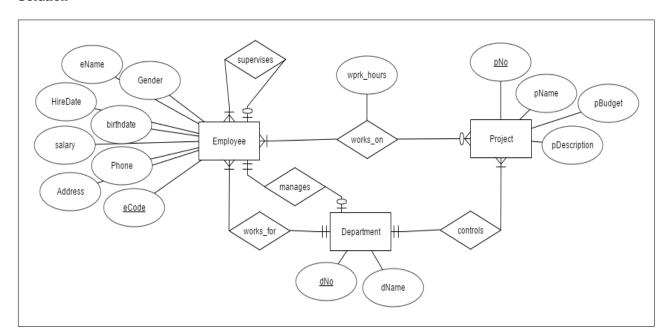
**Assignment No.2: Model Solution** 

Case Study No.1 [10 marks]

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### Solution



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# Solution

