

資料庫管理 HW02

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1. (a)
 - i. **TRUE**, because DEAN is a **relation** between COLLEGE and INSTRUCTOR; and CHAIR is a **relation** between DEPT and INSTRUCTOR.
 - ii. **FALSE**, there's no further restriction on DEAN and CHAIR, so one INSTRUCTOR can be a CHAIR and a DEAN at the same time.
 - iii. **TRUE**, the relation between STUDENT and HAS is a **(0, 1)** relation, so one STUDENT can HAS zero or one DEPT.
 - iv. **TRUE**, the cardinality between STUDENT and TAKES is **(0, N)**, so one student may take zero or more sections; while the cardinality between SECTION and TAKES is **(5, N)**, so one section must be taken by five or more students.
 - v. **TRUE**, the cardinality between COURSE and SECTION is **(1, 1)**, so one section must be related to exactly one course.
- (b) As the following diagram:

INSTRUCTOR

| <u>Id</u> | IName | Rank | IOffice | IPhone |
|-----------|-------|------|---------|--------|
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