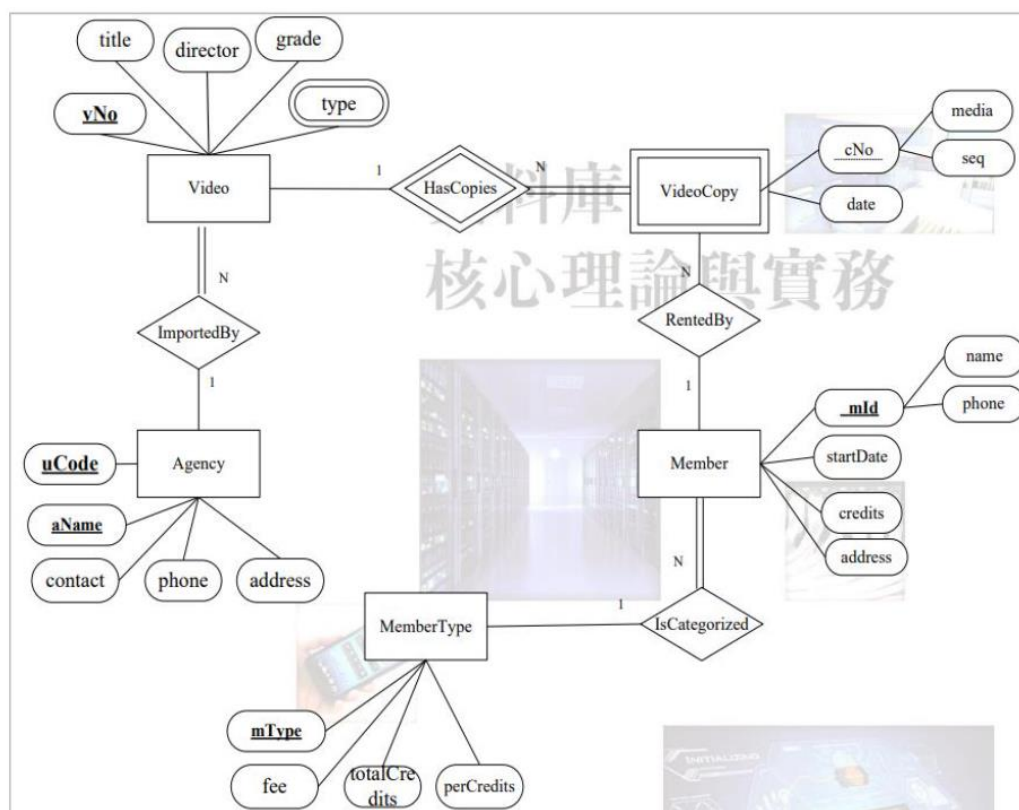


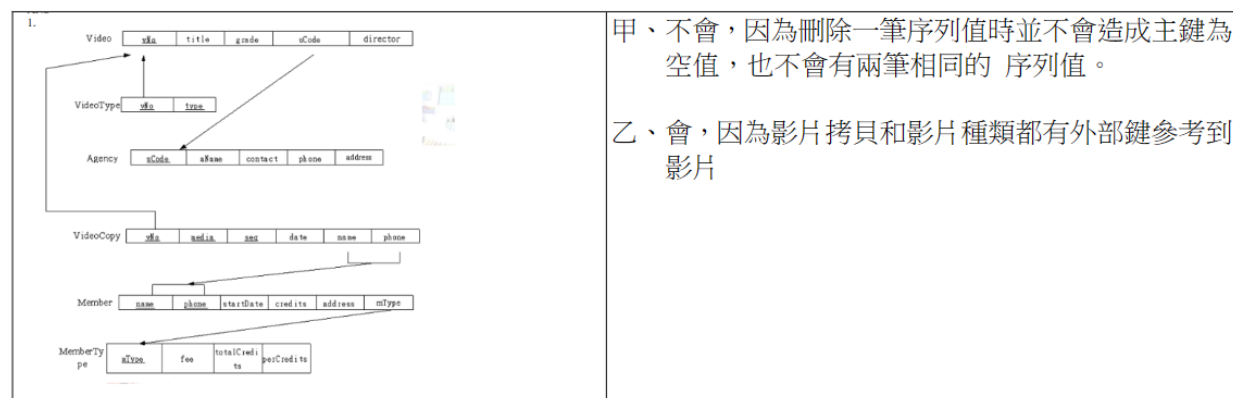
1. (a) 請將下圖之錄影帶租借系統的 ERD 轉成關聯模式的資料庫綱目。



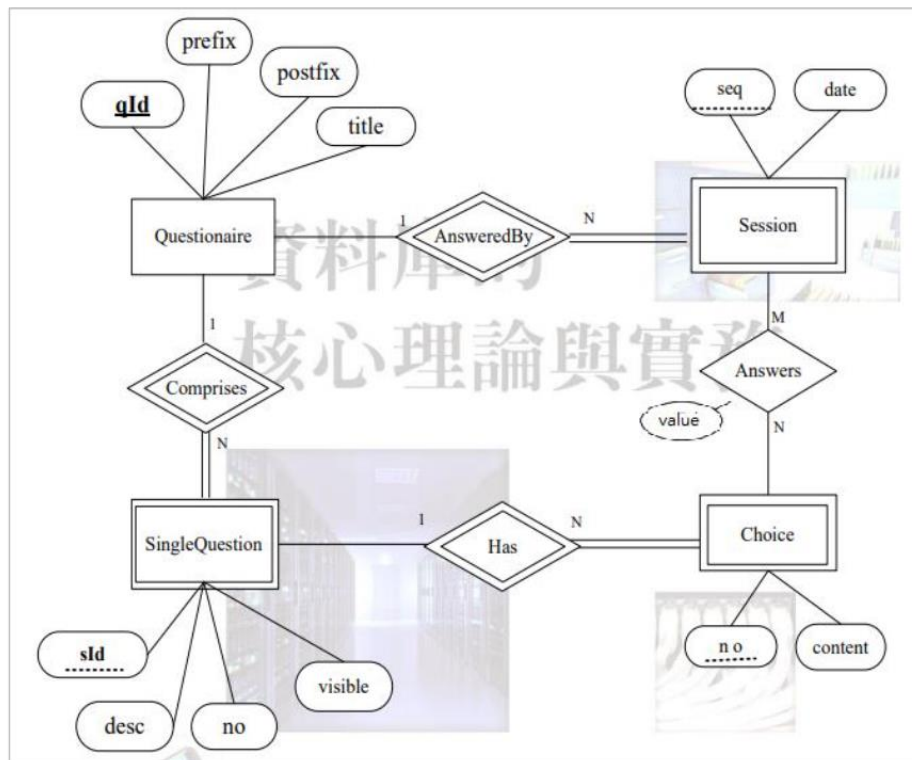
(b) 若今天我想刪掉一筆影片序列值，請問：

- 會影響定義域限制、關聯鍵限制或實體完整限制嗎？為什麼？
- 會影響參考完整限制嗎？哪些關聯會被影響到？

ANS:



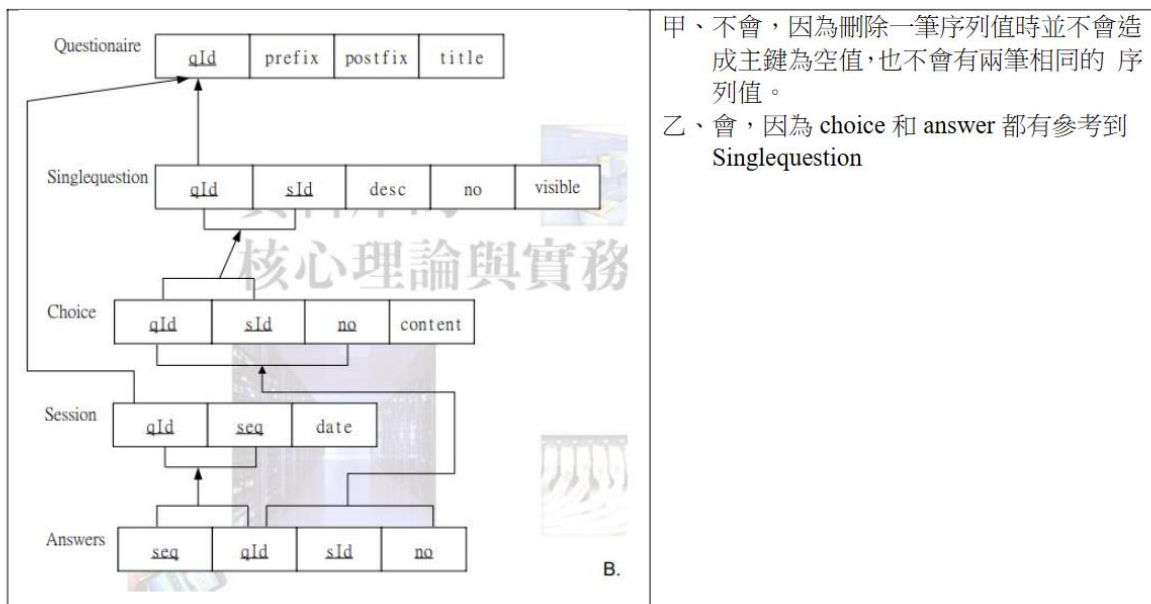
2. (a) 請將下圖之問卷設計系統的 ERD 轉成關聯模式的資料庫綱目。



(b) 若今天我想刪掉一題問卷題目，請問：

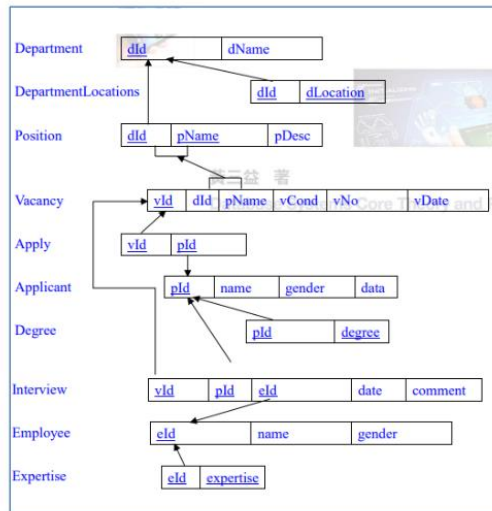
- 會影響定義域限制、關聯鍵限制或實體完整限制嗎？為什麼？
- 會影響參考完整限制嗎？哪些關聯會被影響到？

ANS:



3. 請將下圖之人力資源部門徵才系統的資料庫綱目用 SQL 的 CREATE TABLE 敘述表達出來：

2



ANS :

```
CREATE TABLE Department
(dId CHAR(3) NOT NULL,
dName VARCHAR(20) NOT NULL,
PRIMARY KEY(dId));
```

```
CREATE TABLE DepartmentLocations
(dId CHAR(3) NOT NULL,
dLocation VARCHAR(20) NOTNULL,
PRIMARY KEY(dId, dLocation),
FOREIGN KEY(dId) REFERENCES Department (dId)
ON DELETE CASCADE ON UPDATE CASCADE);
```

```
CREATE TABLE Position
(dId CHAR(3) NOT NULL,
pName VARCHAR(20) NOTNULL,
pDesc VARCHAR(50),
PRIMARY KEY(dId, pName),
FOREIGN KEY(dId) REFERENCES Department (dId)
ON DELETE CASCADE ON UPDATE CASCADE);
```

```
CREATE TABLE Vacancy
```

```

(vId    CHAR(5)      NOT NULL,
dId     CHAR(3)      NOT NULL,
pName   VARCHAR(20)  NOTNULL,
vCond   VARCHAR(20),
vNo     INT          DEFAULT 1,
vDate   DATE,
PRIMARY KEY(vId),
FOREIGN KEY(dId, pName) REFERENCES Position(dId, pName)
ON DELETE CASCADE ON UPDATE CASCADE);

```

CREATE TABLE Applicant

```

(pId    CHAR(5)      NOT NULL,
Name    VARCHAR(10)  NOT NULL,
Gender  CHAR(2)      NOT NULL,
Data    VARCHAR(256),
PRIMARY KEY(pId));

```

CREATE TABLE Apply

```

(vId    CHAR(5)      NOT NULL,
pId     CHAR(5)      NOT NULL,
PRIMARY KEY(vId, pId),
FOREIGN KEY(vId) REFERENCES Vacancy(vId)
ON DELETE CASCADE ON UPDATE CASCADE,
FOREIGN KEY(pId) REFERENCES Applicant(pId)
ON DELETE CASCADE ON UPDATE CASCADE);

```

CREATE TABLE Degree

```

(pId    CHAR(5)      NOT NULL,
degree  CHAR(5)      NOT NULL,
PRIMARY KEY(pId, degree),
FOREIGN KEY(pId) REFERENCES Applicant (pId)
ON DELETE CASCADE ON UPDATE CASCADE);

```

CREATE TABLE Employee

```

(eId    CHAR(4)      NOT NULL,
Name    VARCHAR(10)  NOT NULL,
Gender  CHAR(2)      NOT NULL,
PRIMARY KEY(eId));

```

CREATE TABLE Interview

(vId CHAR(5) NOT NULL,
pId CHAR(5) NOT NULL,
eId CHAR(4) NOT NULL,
date DATE,
comment VARCHAR(256),
PRIMARY KEY(vId, pId, eId),
FOREIGN KEY(vId) **REFERENCES** Vacancy(vId)
ON DELETE CASCADE ON UPDATE CASCADE,
FOREIGN KEY(pId) **REFERENCES** Applicant(pId)
ON UPDATE CASCADE),
FOREIGN KEY(eId) **REFERENCES** Employee(eId)
ON UPDATE CASCADE);

CREATE TABLE Expertise

(eId CHAR(4) NOT NULL,
expertise VARCHAR(20),
PRIMARY KEY(eId, expertise),
FOREIGN KEY(eId) **REFERENCES** Employee(eId)
ON DELETE CASCADE ON UPDATE CASCADE);