

1

- a. Names could duplicate.
- b. It should be kept secretly not everywhere and not everybody has it
- c. Not minimal
- d. 2 courses in different groups may start on a same date.

2.

a.

Curriculum (curriculumCode, name, startYear,) 1 -----

Course (courseCode, name, credit, curriculumCode(FK)) *-----

b.

Curriculum (curriculumCode, name, startYear,)

Curriculum_Course(curriculumCode(FK), courseCode)

Course (courseCode, name, credit, curriculumCode(FK))

3.

- a. One cell only has 1 atomic value and CABIN would be a relation

b.

COUNTRY (countryCode, countryName)

SHIP (shipNumber, shipName, countryCode)

CABIN (cabinNumber, cabinType, shipNumber)

4.

a.

COURSE (courseCode, courseName)

Exam (courseCode(FK), examDate)

QUESTION (questionNumber, questionText, courseCode(FK))

b.

5.

BOOK (ISBN)

BOOK_AUTHOR (ISBN, author) (FK: ISBN to BOOK, author to AUTHOR)

COPY (ID, ISBN) (ISBN to BOOK)

AUTHOR (NUMBER)

6.

schema does not have a primary key. we should add the

7.