

Xu 2, 3, BC NF

bi 2.5.4 / K, L

1NF — 2NF — 3NF — 4NF

3NF  $\Rightarrow$  2NF

$\equiv$  ~~\*~~ 2NF  $\Rightarrow$  3NF

R, F : 2NF

$\exists K, A$  key : A  $\in$   $\text{plad}$ ' K

$K \rightarrow A$   
 $\exists K \in K : K' \rightarrow A$

- $K \rightarrow K'$
  - $K' \rightarrow K$
  - $K' \rightarrow A$
  - $A \notin K \vee K' = K$
- $\rightarrow$  ptb vào  $K$
- $\exists n$

3NF

BCNF

$V \vdash \underline{K} \subseteq V \vdash \underline{\text{other } K}$

other  $\bar{V} \vdash K$

2NF

BCNF  $\Rightarrow$

3NF

$\neg 3NF \Rightarrow \neg BCNF$



Ans:  $NF \rightarrow R = NF \rightarrow$

Ans:  $NF \rightarrow Database = \{ \langle R, F \rangle \}$   
 $= NF \rightarrow R \in NF \rightarrow$

$R7(ABCDE), F7 = \{ AB \rightarrow C, C \rightarrow D, D \rightarrow A \}$

$L = ABCD$ ,  $R = \overline{CDA}$ ,  $NE = E$

$OL = B'$ ,  $LR = ACD$

3NF

0  $BE' = BE$

~~$AD = E$~~

$R(A-B-C-D-E)$

$1 BE' = ABE$

~~$CD = E$~~

$2 BE' = CBEA$

$3 BE' = DBEAC$

~~$AC = E$~~

