1) A) Each value now is atomic --- 1NF

FD1

horseId	horseName	dob	sire	dam

FD2

horseId	horseName	dob	sire	dam
H1	Hn2	D2	S1	

FD3

horseId	horseName	dob	sire	dam
H3	Hn3	D3		Dm3

As Sire and Damn are primary key's (horse id's) they need to have decomposed.

FD4

raceId	raceName	winPurse	placePurse	showPurse
Rc1	rcN1	Wp1	Pp1	Sp1

FD5

horseId	raceId	postPosition	finalStanding	dollars
H1	R1	Post1	Final1	1

B) As horseid and raceID are both primary key's No non-prime attribute may depend on any subset of the PK --- 2NF, rest remains the same.

FD6

horseId	postPosition	dollars
H1	Post1	1

FD7

raceId	finalStanding
R1	Final1

c) Already in 3NF

2) A) All values already atomic, no new tables necessary --- 1NF

LB1

libraryId	name	street	city	state	zip	phone
Lb1	Name1	Street1	Dekalb	IL	60115	8157878888

LB2

bookIsbn	title	publisher	pubDate	pages
12345678910	stillyBook	SillyPub	Jan12018	545

LB3

authorId	fname	lname
121	Abc	Efg

LB4

libraryId	bookIsbn	totalCopies	numOnShelf
Lb1	12345678910	2	1

B) fix the partial key dependency --- 2NF

LB5

libraryId	numOnShelf
Lb1	1

LB6

bookIsbn	totalCopies
12345678910	2

C) Already in 3NF

3) A) Each value now is atomic --- 1NF

DD1

id	commonName	scientificName	contagiousPeriod	lethality
121212	Asprin	scientificNameForIt	11M	0.01

DD2

symptom	description
S1	Desc1

DD3

drug	drugName	generic
Dd1	dName	Crp1

DD4

sideEffect	sDescription
Se1	sDesc1

DD5

drug	sideEffect	severity
Dd2	Se2	Ss1

B) Fix partial key dependency --- 2NF

DD6

drug	sideEffect
Dd3	Se3

C No non-prime attribute may be functionally determined by another non-prime attribute --- 3NF

sideEffect	severity
Se3	Ss1