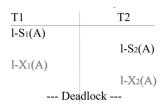
## Sample solutions

## Question 1.

(A) (a)



(b)

	S	X	U
S	T	F	T
X	F	F	F
U	F (T can lead to starvation)	F	F

Observe that matrix is NOT symmetric.

(B)

	R(x)	W(x)	C(x, ?)	C(?, x)
R(x)	T	F	T	F
W(x)	F	F	F	F
C(x, ?)	T	F	T	F
C(?, x)	F	F	F	F

## Question 2

	S	Х	1
S	Т	F	F
Х	F	F	F
1	F	F	1

If a transaction holds an I lock, then no other transactions can hold an S or X lock. However, many transactions can hold an I lock concurrently.

S is serializable and is equivalent to the serial schedule T3, T1, T2

