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Unit Code: FIT3171

Applied Class No: 3

Comments for your marker:

(a)

TIME	TRANS	ACTION	A	B	C	D
0	T1	UPDATE A	X(T1)			
1	T1	UPDATE B		X(T1)		
2	T2	READ C			S(T2)	
3	T2	READ D				S(T2)
4	T3	UPDATE A	T3 wait T1			
5	T2	UPDATE C			X(T2)	
6	T1	ROLLBACK	X(T3)			
7	T3	UPDATE C			T3 wait T2	
8	T2	UPDATE B		X(T2)		
9	T2	UPDATE A	T2 wait T3			

- Does a deadlock exist in this transaction sequence?  
Yes
- Explain why you came to this conclusion.  
There is a deadlock from time 7 to time 9 because transactions T3 and T2 wait for each other

(b)

TRL ID	TRX NUM	PREV PTR	NEX T PTR	OPERATION	TABLE	ROW ID	ATTRIBUTE	BEFORE VALUE	AFTER VALUE
101	601	NULL	112	START	****Start Transaction				
112	601	101	114	UPDATE	PRODUCT	'ABC'	PROD_QO H	1205	1206
114	601	112	117	UPDATE	PART	'A'	PART_QO H	567	566
117	601	114	120	UPDATE	PART	'B'	PART_QO H	98	97
120	601	117	125	UPDATE	PART	'C'	PART_QO H	549	548
125	601	120	NULL	COMMIT	****End of Transaction				

.... add extra rows as needed