Question # 1:

S1:

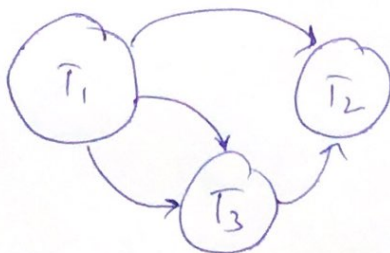| T_1	T_2	T_3
$R_1(x)$		
	$R_2(z)$	
$R_1(x)$		
		$R_3(x) R_3(y)$
$W_1(x)$		
		$W_3(x)$
	$R_2(y) W_2(y)$ $W_2(z)$	

Precedence Graph:
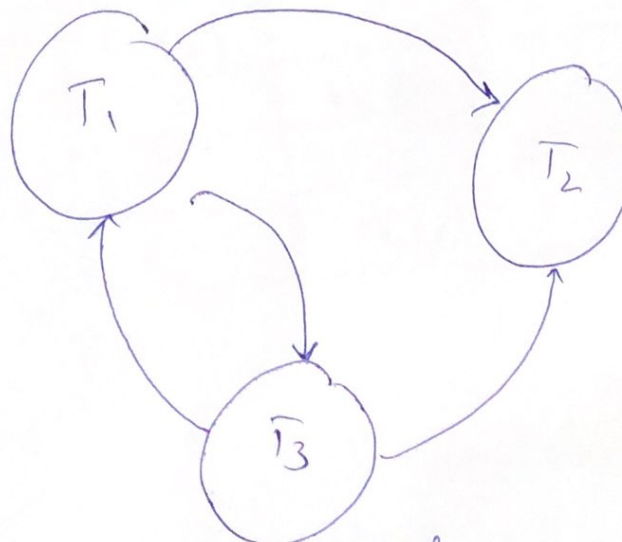
Not serializable because of Cycle.

S2 :-

for S2 the question provided has two
instances of $R_2(Y)$ which is not correct
since there is only one read of object
Y in T_2. So the following solution ignores
second instance of $R_2(Y)$ in S2

T_1	T_2	T_3
$R_1(X)$		
	$R_2(Z)$	
		$R_3(X)$
$R_1(Z)$		
	$R_2(Y)$	
		$R_3(Y)$
$W_1(X)$		
	$W_2(Z)$	
		$W_3(X)$
	$W_2(Y)$	

Precedence Graph :-

Not serializable because
of Cycle present between
T_1 and T_3.

Question 2:

Time	T1 Buffer	T2 Buffer	Actual Database
t1	Total = 100	Null	Current state as given in questia
t2	Total = 125	Null	Same as above
t3	total = 125	P3 = 10	Same as above
t4	total = 125	P3 = 20	Same as above
t5	total = 145	P3 = 20	Same as above
t6	total = 160	P3 = 20	Same as above
t7	total = 210	P3 = 20	Same as above
t8	total = 210	P3 = 20 P1 = 100	Same as above
t9	total = 210	P3 = 20 P1 = 90	Same as above
t10	total = 210	P3 = 20 P1 = 90	Shown in table below

PID	PQuality
P1	90
P2	25
P3	20
P4	15
P5	50

Sum (PQuantity) = 200

The result returned by transaction
T1(210) is wrong because of the incorrect
summary problem i.e the update to P1
by Transaction T2 was missed by
Transaction T1 hence returning incorrect result.