

14.6

Yes, the schedule is conflict serializable. The graph is acyclic and hence the schedule is conflict serializable. A feasible solution is $T_1 \rightarrow T_2 \rightarrow T_4 \rightarrow T_3 \rightarrow T_5$

14.7

1. A cascadeless schedule means that a single transaction failure would not lead to a series of transaction rollbacks. A cascadeless schedule is one where, for each pair of transactions T_i and T_j such that T_j reads a data item previously written by T_i , the commit operation of T_i appears before the read operation of T_j .
2. Because the failure is cheap, which means that the failure of a transaction does not affect others.
3. Performance is more preferable than accuracy or failures are rare.