

1.
 - A. Compare Binary locks to exclusive/shared locks. Why is the later type of Locks Preferable?
 - B. Discuss the timestamp ordering protocol for concurrency control. How strict timestamp ordering does differs from the basic timestamp ordering.
2.
 - (I) What are the before image and after image of a data item. What is the difference between the in place updating and shadowing with respect to their handling of before image & after image.
 - (II) What is meant by rollback? Why it is necessary to check for cascading rollback? Which recovery techniques don't require rollback?
3. Explain in detail the objectives of a DDBMS. What are the constraints in achieving these objectives? How can we remove these constraints?
4. What is Shadowing technique? How it is No-Undo/No-Redo.Explain with the help of Example.
5.
 - (I) Discuss the disadvantages of a typical Distributed DBMS.
 - (II) Discuss Serializability. How we make serial & non serial Schedule Serializable. Which Conflicts should be avoided.