

**UNIT-IV**

S.No	Questions	BT	CO	PO
<b>Part –A(Short Answer Questions)</b>				
1	Define a Transaction? List the properties of transaction	L2	CO4	PO1
2	Discuss different phases of transaction?	L1	CO4	PO1
3	Discuss recoverable schedules?	L2	CO4	PO2
4	Discuss cascade less schedules?	L2	CO4	PO3
5	Define Two Phase Commit protocol?	L2	CO4	PO1
6	Demonstrate the implementation of Isolation	L3	CO4	PO2
7	Discuss the Procedure to test Serializability?	L2	CO4	PO2
8	Explain about different types of locks?	L2	CO4	PO1
9	Explain about transition states?	L2	CO4	PO1
10	Explain about acid properties?	L2	CO4	PO1
<b>Part– B(Long Answer Questions)</b>				
11	a) Write about the transaction management with SQL using commit, roll back and save point.	L2	CO4	PO1
	b) Write and explain the time stamped and optimistic concurrency control?	L3	CO4	PO1
12	a) What is Recoverability ? Discuss types of recoverable schedules?	L2	CO4	PO1
	b) Explain multiple granularities of locking protocol with an example?	L2	CO4	PO4
13	a) Explain the Time Stamp-Based Concurrency Control protocol? How is it used to ensure serializability?	L2	CO4	PO2
	b) Explain the check point log-based recovery scheme for Recovering the database?	L2	CO4	PO3
14	a) What is ARIES (Algorithm for Recovery and Isolation Exploiting Semantics) in crash recovery? Describe the steps in crash recovery in ARIES?	L3	CO4	PO5
	b) What are 2 phase locking protocol? How does it guarantee serializability?	L3	CO4	PO1
15	a) How to test serializability of a schedule? Explain with an Example?	L3	CO4	PO6
	b) Explain the following: (i)Serializability? (ii)Validation Protocol? (iii)Transaction Properties?	L2	CO4	PO2