

## ASSIGNMENT-4

1. What are Armstrong's axioms? Explain any 5 types of Armstrong axioms.
2. What are Anomalies? Explain **Update, Deletion, and Insertion anomalies**.
3. What is the Closure of Attribute sets? Explain with example.
4. What is transaction? Explain transaction log.
5. Explain the transaction state with diagram.
6. What is Relational Algebra? Explain its operator and joins with symbols.
7. What is concurrency control?
8. Compute the closure of the following set F of functional dependencies for relation schema r (A, B, C, D, E).  
 $A \rightarrow BC$   
 $CD \rightarrow E$   
 $B \rightarrow D$   
 $E \rightarrow A?$