Module-5 Concurrency Control & NOSQL DB & Big data storage

1. Explain <u>shared</u> and <u>Exclusive locks</u> with examples & code.

2. Demonstrate <u>Two phase locking</u> protocol used for Concurrency Control.

3. Demonstrate the Concurrency Control based on <u>Timestamp Ordering</u>.

4. When <u>deadlock</u> and <u>starvation problem</u> occur? Explain how these problems are resolved.

5. Explain Multiversion Concurrency Control Techniques

6. Explain Multiple Granularity Level locking.

Chapter NOSQL DB

7. What is NOSQL? Explain CAP Theorem.

8. Demonstrate <u>characteristics</u> of NOSQL System.

9. What are document based NOSQL system? Explain basic operations <u>CRUD in MongoDB</u>

10. Explain NOSQL <u>graph</u> database and <u>Neo4j</u>

<u>Note:</u>
   Study QNO 7, 8, 9, 10 for external VTU.
            - exams