19SB603- Government Initiatives in Distributed Ledger Technology (DLT)

Prepared by,

Mr. L. Mubarali

Assistant Professor/CSE-IoT

SNS College of Engineering

Government Initiatives

Government Initiatives in Distributed Ledger Technology (DLT) in India

- **IndiaStack Blockchain** – Developing a national blockchain infrastructure for digital governance.

- **Land Records Management** – States like Telangana, Maharashtra, and Karnataka use blockchain for **land registry** to prevent fraud.

◆ **CBDC (Digital Rupee)** – The **Reserve Bank of India (RBI)** launched a pilot for the **Central Bank Digital Currency (CBDC)** on blockchain.

◆ **WIPRO & NIC Blockchain Initiative** – The **National Informatics Centre (NIC)** collaborates with Wipro to build **DLT solutions for e-governance**.

◆ **Trade and Supply Chain** – Blockchain is being tested for **streamlining trade finance** (e.g., ICICI Bank and Yes Bank blockchain initiatives).

Example: Bitcoin Blockchain

◆ **Public Ledger** – All Bitcoin transactions are recorded transparently.

◆ **PoW Consensus** – Miners validate transactions through computational puzzles.

◆ **Security** – Uses SHA-256 cryptographic hashing for data integrity.

◆ **Immutability** – Once a block is added, it cannot be altered.

◆ **Decentralization** – No central authority controls Bitcoin transactions.

Real-World Example – Bitcoin and Ethereum use blockchain (a type of DLT) as a public ledger.

L.Mubarali /19SB603 -DISTRIBUTED LEDGER TECHNOLOGY

L.Mubarali /19SB6.. DISTRIBUTED LEDGER TECHNOLOGY