



CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY

Internal Assessment – 1 Syllabus

Department: Computer Engineering		Subject Teacher: Dr. Anshuman Kalla
Program & Semester: B. Tech 7 th CE		Subject Name: Blockchain Technology
Academic Year: 2024 - 25		Subject Code: CY6001
Unit No.	Topic	
1	Introduction to Blockchain Technology: Electronic Systems and Trust, Distributed Versus Centralized Versus Decentralized, Bitcoin Predecessors, DigiCash, E-Gold, Hashcash, B-Money, Bit Gold, The Bitcoin Experiment, Introducing the Timestamp Server, Storing Data in a Chain of Blocks, Bringing Bitcoin to Life, Compelling Components, Achieving Consensus.	
2	Cryptocurrency Fundamentals – I: Public and Private Keys in Cryptocurrency Systems, The UTXO Model, Transactions, The Merkle Root, Signing and Validating Transactions, The Coinbase Transaction, Bitcoin Transaction Security, Hashes, Block Hashes.	

Text Books:

1. Kalle Rosenbaum – “Grokking Bitcoin”, Manning Publication.
2. Lorne Lantz & Daniel Cawrey – “Mastering Blockchain Unlocking the Power of Cryptocurrencies, Smart Contracts, and Decentralized Applications”, O’Reilly Publications

Subject Teacher:
Dr. Anshuman Kalla

Dr. Vibha Patel
Head of Department