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#### **An Autonomous Institution**

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### DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

**COURSE NAME: 19CS622-Blockchain Technology** 

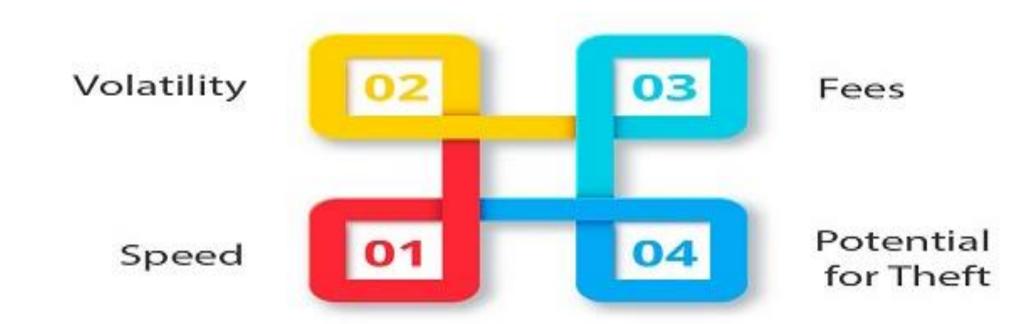
III YEAR /VI SEMESTER

Unit 2- CRYPTOCURRENCY

Topic 1 : Limitations of Bitcoin











# Limitations of a bitcoin - Speed

- The present architecture of the Bitcoin network is capable of processing a maximum of seven transactions per second.
- But, Visa's network can handle a whopping 24,000 transactions per second.

• There's also a speed issue when it comes to how often a new block is created on Bitcoin.







- Bitcoin is only partially anonymous experts call this pseudo-anonymity.
- Some Bitcoin exchanges also require users to submit identifying information.
- If these databases get hacked, then someone can find out what you've been up to.





## Limitations of a bitcoin - Fees

- Because space in a block is limited, and there are only so many miners on the network, users attach a fee to incentivize miners to include their transaction before others.
- making Bitcoin unsuitable for small transactions





## Limitations of a bitcoin – 51% attack

• If someone or a group acting together controls more than half the computer power being used for mining, they could rewrite the financial history of the blockchain allowing them to double-spend currency.





## Summary

• Several developers, groups and companies have created their own currencies as a direct way of solving some of the Bitcoin's problems.



## References

#### **TEXT BOOKS**

- 1. Mastering Bitcoin: Unlocking Digital Cryptocurrencies, by Andreas M Antonopoulos 2018
- 2. Imran Bashir, "Mastering Blockchain: Distributed Ledger Technology, Decentralization and Smart Contracts Explained", Second Edition, Packt Publishing, 2018.
- 3. https://101blockchains.com/blockchain-vs-database-the-difference/

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- 1. William Mougayar, "Business Blockchain Promise, Practice and Application of the Next Internet Technology, John Wiley & Sons 2016.
- 2. Josh Thompson, 'Blockchain: The Blockchain for Beginnings, Guild to Blockchain Technology and Blockchain Programming', Create Space Independent Publishing Platform, 2017.
- 3. Arvind Narayanan, "Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction", Princeton University Press, July 19, 2016.
- 4. Henning Diedrich, Ethereum: Block chains, Digital Assets, Smart Contracts, Decentralized Autonomous Organizations-2016

### **Thank You**