

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
**(AUTONOMOUS)**

**B.Tech III Year I Semester Regular & Supplementary Examinations February-2024**  
**CRYPTO CURRENCY AND INTRODUCTION TO BLOCKCHAIN TECHNOLOGY**  
CSE (Internet of Things and Cyber security Including Block Chain Technology)

**Time: 3 Hours****Max. Marks: 60**(Answer all Five Units  $5 \times 12 = 60$  Marks)**UNIT-I**

- 1 What is Hash Function in cryptography? Write Features of CO1 L2 12M  
Hashfunctions.

**OR**

- 2 a Define Distributed Database. Explain it types. CO1 L1 6M  
b Write short notes on Turing Complete. CO1 L3 6M

**UNIT-II**

- 3 a Distinguish between Bitcoin blockchain and Ethereum blockchain. CO2 L4 6M  
b Describe the gas limit concept in detail. CO2 L6 6M

**OR**

- 4 a How does Blockchain differ from relational databases? CO2 L1 6M  
b What type of records can be kept in the Blockchain? Is there any CO2 L2 6M  
restriction on the same?

**UNIT-III**

- 5 a How the Bitcoin network prevents sybil attack? CO3 L1 6M  
b What are the ways to prevent sybil attack? CO3 L1 6M

**OR**

- 6 Explain Energy Utilization in detail. CO3 L2 12M

**UNIT-IV**

- 7 a Examine Bitcoins protocols in detail. CO4 L4 6M  
b Write in detail about GHOST. CO4 L3 6M

**OR**

- 8 Compare the features of Bitcoin and Blockchain. CO4 L3 12M

**UNIT-V**

- 9 Explain Black Market and Global Economy in detail. CO5 L2 12M

**OR**

- 10 Explain Blockchain applications. CO5 L5 12M

