

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2025
BLOCK CHAIN TECHNOLOGIES
(CSM)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A**(20 Marks)**

1. a) Define Blockchain. [2M]
- b) What are different types of Blockchain? [2M]
- c) What are the technologies works behind the Blockchain Technology? [2M]
- d) Define Public key. [2M]
- e) What is relation between Bitcoin and cryptocurrency? [2M]
- f) What is the payment system of bitcoin? [2M]
- g) Define precompiled contracts. [2M]
- h) What is ethereum in blockchain? [2M]
- i) What is the purpose of IoT in blockchain? [2M]
- j) What is the purpose of a block in blockchain? [2M]

PART-A**(20 Marks)**

2. Explain the History of Blockchain. [10M]
- OR**
3. What are the benefits and limitations of Blockchain? [10M]
 4. Compare centralized vs Decentralized vs Distributed System with diagrams. [10M]
- OR**
5. List out what are the methods of decentralization. [10M]
 6. Describe about Bitcoin working mechanism with example. [10M]
- OR**
7. Explain about Hierarchical deterministic wallets. [10M]
 8. Explain about Ricardian contract properties. [10M]
- OR**
9. What are the elements of ethereum blockchain? [10M]
 10. List out the applications of Blockchain in detail. [10M]
- OR**
11. Discuss about the benefits IoT in government. [10M]
