







## A Report on

# Online Guest Lecture on the topic "Basic Concepts of cryptography & Block chain Technologies" Organized by

Department of Computer Science & Engineering 01.05.2024



Resource Person Details: Dr. S. Gnanavel, Associate Professor, Department of Computing Technologies, SRM Institute of Science and Technology

Report Submitted by: Mrs. G. B. Renuka, Assistant Professor, Dept. of CSE

Mode of Conduct: Online Report Received on 03.05.2024

The programme started at 3:30 PM, the entire programme was organized by the Coordinator Mrs. G B Renuka, Assistant Professor, Department of Computer Science & Engineering, Madanapalle Institute of Technology & Science, Madanapalle and welcome address was delivered to the gatherings by the Dr. R. Kalpana, HOD/CSE, Madanapalle Institute of Technology & Science, Madanapalle. The resource person Dr. S. Gnanavel, Associate Professor, Department of Computing Technologies, SRM Institute of Science and Technology –Kattankulathur, Chennai.

The resource person started the session by extending his hearty thanks to the participants, organizing members, HOD, Principal and Management of MITS Madanapalle for giving him opportunity to share his knowledge and experience in basic concepts of cryptography and blockchain technologies is crucial in today's digital world, as they play significant roles in securing and managing digital information. 70 students of Dept of CSE have attended this session.



The following essential topics in cryptography and block chain technologies discussed elaborately:

#### **Cryptography:**

- 1. Symmetric Cryptography
- 2. Asymmetric Cryptography
- 3. Hash Functions
- 4. Digital Signatures
- 5. Key Management
- 6. Cryptographic Protocols

## **Blockchain:**

- 7. Cryptographic Primitives in Blockchain
- 8. Smart Contracts
- 9. Blockchain Security
- 10. Blockchain Applications

### **Outcomes of the Guest Lecture:**

- 1. Aims to equip attendees with a foundational understanding of cryptographic principles and their application in block chain systems.
- 2. Through the lecture, participants gain insights into encryption techniques, digital signatures, hashing, and key management.
- 3. Alongside comprehending the core components and functionalities of block chain, including consensus mechanisms and smart contracts.

By elucidating real-world examples and discussing security implications, the lecture fosters awareness of the significance of cryptography in ensuring the security, privacy, and integrity of block chain-based transactions.



The session was concluded at 5.00 PM followed by a vote of thanks, given by coordinator of the Guest Lecture– Mrs. M Sangeetha, Assistant Professor, Department of CSE, MITS, Madanapalle.