

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER VII- EXAMINATION –SUMMER-2022

Subject Code: 2678605**Date: 06/06/2022****Subject Name: Block Chain Technology****Time: 02:30 PM to 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Do as directed.
1. Define Transaction. **01**
 2. List out advantages of Block Chain Technology. **03**
 3. What is Cryptography? Write any five types of crypto-currency available in market. **03**
- (b)** What is block chain? How it works? Explain with example. **07**
- Q.2 (a)** What is the use of consensus building algorithm? Give the difference between POW and POS. **07**
- (b)** Write a short note on DLT. **07**
- OR**
- (b)** Define Hashing. List out types of Hashing Techniques. Explain Mid-square hashing technique with example. **07**
- Q.3 (a)** List out types of Block Chain implementation. Explain each in detail. **07**
- (b)** Define Smart Contracts. List out applications of smart contracts. Discuss advantages of Smart contracts. **07**
- OR**
- Q.3 (a)** Define Bit coin. Explain bit coin block structure along with its attributes. **07**
- (b)** Write a short note on Byzantine Agreement Algorithm Method. **07**
- Q.4 (a)** Write a short note on Merkle Tree. **07**
- (b)** What is Bitcoin wallet? Explain types of Bitcoin Wallet. **07**
- OR**
- Q.4 (a)** What is Ethereum? Differentiate Symmetric and Asymmetric cryptography with example. **07**
- (b)** Write a short on Message Authentication Code. **07**
- Q.5 (a)** List out Block chain applications. Discuss block chain for healthcare. **07**
- (b)** Discuss applications of smart contracts in supply chain management. **07**
- OR**
- Q.5 (a)** Discuss how block chain technology helpful in insurance sector. **07**
- (b)** How Block chain technology can benefits the Internet of things? **07**
