

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER - VII EXAMINATION –WINTER-2021

Subject Code: 2678605**Date: 01/12/2021****Subject Name: Block Chain Technology****Time: 10:30 AM TO 01:00 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) What is block chain? Explain Architecture of Block chain. **07**
(b) Explain secure Hash algorithm and Distributed Hash tables. **07**
- Q.2** (a) What is DLT? Explain DLT decentralize applications and databases? **07**
(b) Explain consensus approach and algorithms. **07**
- OR**
- (b) Explain Byzantine agreement Methods. **07**
- Q.3** (a) Explain Ethereum block chain concept. **07**
(b) Difference between smart contract and consensus. **07**
- OR**
- Q.3** (a) Explain symmetric and asymmetric cryptography. **07**
(b) Explain Merkle trees. **07**
- Q.4** (a) Explain smart contract with an appropriate example. **07**
(b) Explain following terms. **07**
(i) Bitcoin Address.
(ii) Bitcoin wallet
(iii) Bitcoin supply
- OR**
- Q.4** (a) Law implementation and sentiment, characteristics in context of Smart contract. **07**
(b) Explain Bitcoin block structure and working of Bitcoin. **07**
- Q.5** (a) What is Robotics process automation? How block chain improve in the RPA technology. **07**
(b) Explain block chain application in Insurance sector. **07**
- OR**
- Q.5** (a) List various Block chain applications. Explain block chain application in Health care. **07**
(b) Discuss block chain impact on cloud computing, Artificial intelligence, IOT. **07**
