

Total No. of Questions : 4]

SEAT No. :

P-5191

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**B.E. (Computer Engineering) (Insem)**

**BLOCK CHAIN TECHNOLOGY**

**(2019 Pattern) (Semester - VII) (410243)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Solve Q1 or Q2, Q3 or Q4.*
- 2) *Figures to the right indicate full marks.*
- 3) *Assume Suitable data, if necessary.*
- 4) *Neat diagrams must be drawn wherever necessary.*

- Q1)** a) Illustrate Elliptic Curve Cryptography. [6]  
b) Justify the importance of Hashing in Block Chain. [4]  
c) What is Merkle tree? Explain the structure of merkle tree. [5]

OR

- Q2)** a) Explain working of SHA 256 Algorithm. [6]  
b) Describe Digital Signature & Verification steps in Digital Signature Algorithm. [4]  
c) Describe Symmetric Key Encryption with neat diagram. [5]

- Q3)** a) Discuss various limitations of centralized system with respect to Decentralized system. [6]  
b) Write a note on Evolution of Block Chain. [4]  
c) List and Explain algorithms of Consensus layer. [5]

OR

- Q4)** a) Write a note on : [6]  
i) Propagation layer  
ii) Application layer  
b) List & Explain features of Block Chain. [4]  
c) Comment on "Feasibility of an Online Voting System Implementation" using Block Chain Technology. [5]

