

# SPPU-BE-COMP-CONTENT – KSKA Git

Total No. of Questions : 4]

SEAT No. :

PC185

[6361]-43

[Total No. of Pages : 1

**B.E. (Computer Engineering) (Insem)  
BLOCKCHAIN TECHNOLOGY  
(2019 Pattern) (Semester-VII) (410243)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*

- Q1)** a) Differentiate between symmetric and asymmetric key cryptography. [5]  
b) What is hashing? Explain role of hashing in Blockchain. [5]  
c) What is Merkle tree? Explain with diagram. [5]

OR

- Q2)** a) Explain digital signature algorithm. [5]  
b) What are the benefits of Merkle tree in Blockchain. [5]  
c) Discuss elliptic curve cryptography. [5]

- Q3)** a) Explain consensus Layer in Blockchain. [5]  
b) Differentiate between centralized and decentralized systems. [5]  
c) Discuss evolution of Blockchain. [5]

OR

- Q4)** a) Explain semantic Layer in Blockchain. [5]  
b) Discuss importance of Blockchain. [5]  
c) What is decentralized system? Explain with diagram. [5]

