

Total No. of Questions : 8]

SEAT No. :

P-629

[Total No. of Pages : 2

[6004]-583

**B.E. (Information Technology)**  
**BLOCKCHAIN TECHNOLOGY**

**(2019 Pattern) (Semester - VIII) (414452D) (Elective - VI)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and Q.7 or Q.8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

- Q1)** a) What is Smart Contract? Explain types of Smart Contracts. [7]  
b) What is Ethereum? Give it's comparison with Bitcoin. [6]  
c) State and explain the various components of Ethereum. [5]

OR

- Q2)** a) What is Ethereum? Explain. [7]  
b) Write Short Note on: [6]  
i) Ethereum Virtual Machine: EVM.  
ii) Ethereum Programming Languages  
iii) Runtime Byte Code  
c) Explain solidity in detail. [5]

- Q3)** a) Draw and Explain the Architecture of Hyper ledger Fabric System.[6]  
b) What is Hyper ledger? Describe features of a Hyper ledger blockchain. [6]  
c) Differences between Ethereum & Hyper ledger blockchain platforms.[5]

OR

- Q4)** a) State and explain benefits of Hyper ledger Fabric. [6]  
b) How Does Hyper Ledger Fabric Work? Explain. [6]  
c) What is Hyperledger Technology and Hyperledger fabric? [5]

**P.T.O.**

- Q5) a)** Short note on : [7]  
i) Tokenizing Shares and Fund Raising  
ii) Challenges to tokenization
- b) State and explain different types of Consensus algorithm. [6]
- c) How blockchain tokenization can help in enterprise systems? Elaborate. [5]

OR

- Q6) a)** What is token? Describe technology behind tokenization. [7]
- b) Describe the Consensus mechanism in brief. [6]
- c) Discuss following consensus algorithms used in blockchain technology. [5]  
i) Proof of work  
ii) Proof of activity

- Q7) a)** Explain blockchain applications in Supply Chain Financing. [6]
- b) Explain different aspects of Risks and Limitations of Blockchain. [6]
- c) State and explain different aspect of healthcare where Blockchain Technology can be used. [5]

OR

- Q8) a)** Explain role blockchain applications in Health Insurance. [6]
- b) What are the selection Criteria for Blockchain platform for Applications? Explain. [6]
- c) Explain the “Evil Sides” of Blockchain and Legal Regulations for Blockchain. [5]

