DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Winter Examination – 2022

Course: B. Tech.   **Branch : Computer Science and Engineering**   **Semester : VII**

Subject Code & Name: BTCOE704(A) Blockchain Technology

Max Marks: 60   **Date: 07/02/2023**   **Duration: 3 Hr.**

Instructions to the Students:
1. *All the questions are compulsory.*
2. *Use of non-programmable scientific calculators is allowed.*
3. *Assume suitable data wherever necessary and mention it clearly.*

		Marks
Q. 1	**Solve Any Two of the following.**	**12**
A)	What is Blockchain? Explain key elements of it.	**6**
B)	Difference between public vs. private Blockchain.	**6**
C)	Explain Merkel Tree and Merkel Tree Structure.	**6**
Q.2	**Solve Any Two of the following.**	**12**
A)	What is Bitcoin Mining and How Does Bitcoin Mining Work?	**6**
B)	Why Proof of Burn required and how does algorithm work?	**6**
C)	How do P2P networks work? Explain its type.	**6**
Q. 3	**Solve Any Two of the following.**	**12**
A)	Explain design issues for permissioned Blockchain with any 2 issues.	**6**
B)	Explain Paxos algorithm in detail.	**6**
C)	What is Byzantine general problem and How Bitcoin Solves the Byzantine General's Problem?	**6**
Q.4	**Solve Any Two of the following.**	**12**
A)	How KYC on Blockchain can help?	**6**
B)	How Blockchain benefits food security in future?	**6**
C)	How does Digital Identity work today using Blockchain?	**6**
Q. 5	**Solve Any Two of the following.**	**12**
A)	Explain Hyperledger Fabric and how does it work?	**6**
B)	What are the benefits of Hyperledger Fabric?	**6**
C)	Explain writing smart contract using Ethereum ?	**6**

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