

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Honours programme (01)

Sem-VI

May-June 2025

(B.Tech.) Program: Honours Degree Scheme: II

Supplementary Examination: TY Semester: VI

Course Code: **HBCC601** and Course Name: **Block chain Platform**

Date of Exam: **Saturday, 25/07/2025**

Duration: **2.5 Hours**

Max. Marks: **60**

25/07/2025

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

		Max. Marks	CO	BT level
Q.1	Solve any two questions out of three.	10		
i)	Explain technology requirements for implementation for Blockchain technology.	5	CO1	U
ii)	Compare of Bitcoin and Ethereum.	5	CO2	U
iii)	Explain Dapp Architecture.	5	CO3	C
Q.2	Solve any two questions out of three.	10		
i)	Explain Fundamentals of Paxos Algorithm.	5	CO4	C
ii)	Explain Hyperledger Fabric Architecture.	5	CO5	U
iii)	Explain features of Corda blockchain?	5	CO6	An
Q.3	Solve any two questions out of three.	20		
i)	Draw and explain Blockchain Infrastructure?	10	CO1	U
ii)	Explain Beacon chain architecture with diagram.	10	CO3	C
iii)	Explain components of the Hyperledger Fabric network with block diagram.	10	CO5	U
Q.4	Solve any two questions out of three.	20		
i)	Explain Characteristics of Public Blockchain. Explain role of smart contract in Public blockchain.	10	CO2	U
ii)	Explain Consensus Algorithm for private Blockchain.	10	CO4	C
iii)	Explain AWS Managed Blockchain with diagram.	10	CO6	An