

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

Nov – Dec 2024		
Program: B.Tech. (All Branches - Honors) Scheme I		
Regular Examination: LY Semester: VII		
Course Code: HBCC701 and Course Name: Block Chain Development		
Date of Exam: 03/12/2024	Duration: 02.5 Hours	Max. Marks: 60

Instructions: (1) All questions are compulsory. (2) Draw neat diagrams wherever applicable. (3) Assume suitable data, if necessary.				
Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any two questions out of three: (05 marks each)	10		
a)	Explain swarm and whisper with example.		CO1	U
b)	Analyze the need of IPFS.		CO2	An
c)	Apply the concept of smart contract by taking a use case.		CO3	A
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Analyze the connectivity of Blockchain and Smart Contract.		CO4	An
b)	Using a diagram explain working of Hyperledger.		CO5	A
c)	Analyze and Explain Research challenges in blockchain.		CO6	An
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Draw and explain architecture of Ethereum in detail.		CO1	U
b)	Compare different blockchain programming languages.		CO2	An
c)	Explain solidity program to demonstrate how to write a smart contract in Solidity.		CO3	A
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Analyze how Smart Contract is deployment on a Private Blockchain.		CO4	An
b)	Explain industry Use Cases for applying Hyperledger Fabric.		CO5	A
c)	Illustrate IoT-Blockchain architecture with Real Time Example.		CO6	An
