	Nov – Dec 2024 B. Tech Program: Honour Blockchain, Scheme II Regular Examination: TY Semester: V Course Code: HBCC501 and Course Name: Bit coin and Crypto currency
Date of Exam: 5/12/2025	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 Proof of Work (PoW) and Proof of Stake (PoS) in block chain.		CO-1	U
b)	Explain Bitcoin's basic features.		CO3	U
c)	Illustrate Blockchain Authentication process with block duagram? Explain with example.		CO5	A
Q 2	Solve any **two** questions out of three: (05 marks each)	10		
a)	Explain how does blockchain solve the Byzantine generals problem?		CO2	U
b)	Convert Integer 51515 base10 to base58.		CO4	A
c)	Examine and Explain components of a blockchain system?		CO6	An
Q.3	Solve any **two** questions out of three. (10 marks each)	20		
a)	Explain working of Blockchain? Explain with example.		CO1	U
b)	Explain with diagram how Bitcoin is forked. Differentiate Full vs Simple Payment Verification in Blockchain.		CO3	U
c)	Demonstrate characters are in Base58? Explain with diagram Network Discovery with detailed diagram.		CO5	A
Q.4	Solve any **two** questions out of three. (10 marks each)	20		
a)	Explain with diagram Blockchain nodes and their types. Who can add transactions to blockchain?		CO2	U
b)	Demonstrate How Do Blockchain Wallets Work? Why Use Blockchain Wallet? Explain features.		CO4	A
c)	Examine Case study on Insurance Company in Blockchain with any Real Time Example with necessary block diagram.		CO6	An

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