

202.				
B.Tech Program: Honours				
Examination: TY Semester: V				
Course Code: HBCC501 and Course Name: Bit coin and Crypto currency				
Duration: 08 Hours 2.5 Max. Marks: 60				
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 six questions out of eight:	12		
i)	How big is a block in a blockchain?	2	CO1	U
ii)	What are three types of consensus in Bitcoin?	2	CO2	U
iii)	What happens when Bitcoin is forked?	2	CO3	U
iv)	Is there a record of Bitcoin transactions? explain.	2	CO3	U
v)	What characters are in Base58?	2	CO4	U
vi)	How does a deterministic wallet work?	2	CO4	U
vii)	What are the different types of nodes in blockchain?	2	CO5	U
viii)	What is locking unlock script?	2	CO6	U
Q.2	Solve any four questions out of six.	16		
i)	Differentiate Proof of Work (PoW) and Proof of Stake (PoS) in block chain.	4	CO1	Apply
ii)	How does blockchain solve the Byzantine generals problem?	4	CO2	Create

iii)	Explain Bitcoin's basic features.	4	CO3	An
iv)	Convert Integer 51515 base10 to base58.	4	CO4	U
v)	What is Blockchain Authentication? Explain with example.	4	CO5	U
vi)	Explain 5 key components of a blockchain system?	4	CO6	U
Q.3	Solve any two questions out of three.	16		
i)	How Does the Blockchain Work? Explain with example.	8	CO1	Apply
ii)	How Do Blockchain Wallets Work? Why Use Blockchain Wallet? Explain features.	8	CO4	U
iii)	Explain Network Discovery with detailed diagram.	8	CO5	U
Q.4	Solve any two questions out of three.	16		
i)	Explain Blockchain nodes and their types. Who can add transactions to blockchain?	8	CO2	U
ii)	Explain Full vs Simple Payment Verification in Blockchain.	8	CO3	U
iii)	Explain Case study on Insurance Company in Blockchain with any Real Time Example.	8	CO6	U
