

UNIT – I		Marks
1	Describe five core components of blockchain technology.	(10)
2	Discuss how problems with scaling and interoperability affect wider blockchain utilization.	(05)
3	Describe how blockchain is helpful for e-commerce transactions.	(05)
4	Discuss the various consensus algorithms and how they work?	(06)
5	CAP theorem applied on distributed systems. Justify	(08)
6	Discuss the various benefits and limitations of blockchain.	(06)
UNIT – II		
1	Discuss the methods involved in decentralization of blockchain concepts.	(06)
2	Differentiate the DAC and DAS applied over blockchain technology.	(06)
3	Discuss the Public and private keys Hash functions applied over a specific application over blockchain technology.	(08)
4	Discuss on how secure hash algorithm applied over cryptographic functions.	(08)
5	Describe the use of Elliptic Curve Digital signature algorithm (ECDSA) on a RSA algorithm.	(06)
6	Explain the concept of digital signatures applied in the applications of blockchain technology.	(06)
UNIT – III		
1	Discuss the transaction life cycle applied over the bitcoin on a blockchain technology.	(10)
2	Discuss on bitcoin network for the nodes exchange transactions and blocks.	(10)
3	Discuss the various protocol messages and how they likely to increase over time as the protocol grows.	(10)
4	Write short notes on Deterministic and Non-deterministic wallets	(10)
UNIT – IV		
1	Differentiate Ethereum blockchain with bitcoin blockchain concepts.	(06)
2	Discuss on the concept of existing GAS concept over the ethereum blockchain technology.	(06)
3	Discuss the ethereum transactions on blockchain to disrupt business models or invent new ones.	(08)
4	Discuss the ethereum virtual machine that works on a stack-based architecture.	(10)
5	List the steps involved in applying the ethereum tool applied over a specific applications and its usage of improvement.	(10)
UNIT-V		
1	Explain Block chain based IOT Model.	(10)
2	Explain automated border control application using block chain.	(10)
3	Explain the blockchain based on Finance	(10)
4	Explain the blockchain based on media	(10)