PES University, Bengaluru
(Established under Karnataka Act No. 16 of 2013)

December 2019: End Semester Assessment
B.TECH. VII Semester MOOC CSE
UE16CS431: Blockchain Architecture and Use cases (MOOC)

Time: 180 Mins | Answer All Questions | Max Marks: 100

Q.N	Questions	Marks
1a.	Define Blockchain and smart contracts. Explain Contracts in a Centralized Platform.	6M
1b.	What is public key cryptography? How it can be used for Digital Signature in blockchain.	10M
1c.	List and explain types of distributed consensus, faults in consensus and properties of consensus.	4M
2a.	Differentiate between Proof of Work and Proof of Stake.	6M
2b.	Describe How three-phase commit protocol avoid blocking	9M
2c.	Give any five difference between Permission-less and permissioned blockchains.	5M
3a.	Mention three goals of Hyper ledger composer. How the concept of business service provider can be applied to vehicle auction developer example.	9M
3b.	With the help of neat diagram, Explain the securities T+3 trade life Cycle	7M
3c.	Explain the advantages of using blockchain for trade finance.	4M
4a.	How blockchain can be used for healthcare application. Explain any three tasks of this application using blockchain.	6M
4b.	Analyze the processing of tax payments using blockchain and without using blockchain.	10M
4c.	Describe privacy in Blockchain.	4M
5a.	List any five cryptocurrencies. Mention the technical limitations of cryptocurrencies.	8M
5b.	Explain the charcterstics of bigdata and features of BigchainDB.	6M
5c.	With the help of neat diagram, explain the architecture of ethereum.	6M