



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2022

Course: Introduction to BlockChain

Program: BTech CSE CSF

Course Code: CSBL3012P

Semester: V

Time: 03 hrs.

Max. Marks: 100

Instructions:

**SECTION A
(5Qx4M=20Marks)**

S. No.		Marks	CO
Q 1	What is collision resistant feature of hashing?	4	CO1
Q 2	Discuss double spending problem and one solution.	4	CO2
Q 3	Explain advantages of hyper ledger fabric.	4	CO4
Q 4	Explain differences in private and public keys in blockchain.	4	CO2
Q 5	Differentiate between centralized and distributed architecture.	4	CO1

**SECTION B
(4Qx10M= 40 Marks)**

Q 6	Discuss Blockchain in Finance. Explain advantages and disadvantages in current system and block chain use case.	10	CO4
Q 7	Explain Privacy preserving policy in Blockchain and discuss in context of different ids.	10	CO2
Q 8	Discuss ledger update issues in blockchain. Differentiate between hyper ledger and hyper ledger fabric.	10	CO3
Q 9	Explain blockchain usecase in healthcare. Or Explain blockchain in supply chain.	10	CO5

**SECTION-C
(2Qx20M=40 Marks)**

Q 10	Explain Blockchain ledger, working principle and data update policy in blockchain. How it is associated with transfer of ownership. Draw the diagrams and explain answer stepwise.(6+4+6+4)	20	CO5
Q 11	Discuss hashing properties and how it is used in blockchain. Explain hashing algorithm and triple-blind privacy principle and functionality.(4+4+6+6) Or Discuss membership identification problem in blockchain. How it is associated with owner identification problem. Discuss solution to membership identification problem in blockchain with diagram.(5+5+10)	20	CO3