


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Course: Emerging areas in Blockchain Program: B.Tech CS with Blockchain Course Code: CSBL4002		Semester: VII Time : 03 hrs. Max. Marks: 100	
Instructions: Answer all the questions			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Outline the significant advantages of integrating blockchain technology with the Internet of Things.	4	CO2
Q 2	Identify some relatively new areas where blockchain might have applications.	4	CO6
Q 3	List the various models of digital identity management.	4	CO5
Q 4	Describe the on-chain and off-chain governance.	4	CO4
Q 5	Describe the two major properties of blockchain network.	4	CO3
SECTION B (4Qx10M= 40 Marks)			
Q 6	Describe the business use case of food industry related to blockchain traceability and transparency.	10	CO1
Q 7	Discuss the concept of proving (verifying) real estate ownership. or Describe permissioned blockchains and discuss why they should be the type of blockchain to adopt in the supply chain context.	10	CO4
Q 8	Identify the major challenges associated with retail industry before integrating the blockchain technology.	10	CO3
Q 9	Describe the potential benefits of crypto philanthropy.	10	CO2
SECTION-C (2Qx20M=40 Marks)			

Q 10	<p>US based startup company with 10 years of experience in real estate based technology, intended to enter into Billion Dollar Property rental market with Blockchain technology. The company intends to provide fast, secure, transparent property rental transactions and payments.</p> <p>Describe the challenges that are faced while designing the Ethereum based solution for rental transactions and payments. Further, provide the appropriate solution to overcome those challenges.</p> <p style="text-align: center;">or</p> <p>Usually, farmers have to deal with unpredictable weather conditions when cultivating various crops. Hence, it is critical to ensure the crop survival by monitoring as well as being able to predict weather conditions.</p> <p>As a blockchain expert suggest the appropriate solution to farmers that they can overcome the weather cries by adopting blockchain. Further, explain how to manage the agriculture finance by leveraging the blockchain.</p>	20	CO6
Q 11	Describe the current banking and financial services industry (BFSI) challenges as well as how blockchain technology might help to address those challenges.	20	CO5