Reg. No. : | | | | | | | | | | | | |

Question Paper Code: U4308

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

Professional Elective

Electronics and Communication Engineering

21ECV308 BLOCK CHAIN TECHNOLOGY

(Regulations 2021)

Duration: Three hours | Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1.	Provide an example of how block chain can benefit consumers.	CO2-App
2.	Explain the difference between Proof-of-Work and Proof-of-Stake.	CO1-U
3.	How problems with scaling and interoperability affect wider block chain utilization? Discuss.	CO3-App
4.	Identify the steps needed for block chain to be effective.	CO3-App
5.	Apply any three major characteristics of money that bitcoin possesses.	CO3-App
6.	Apply the concept of token on how to develop a cryptographic token.	CO3-App
7.	Analyze the alternate block chain (Kerana) with the traditional block chain technology.	CO5-Ana
8.	Analyze the concept of block chain in finance with real time application.	CO5-Ana
9.	Analyze the common uses for block chain within financial services.	CO6-Ana
10.	Analyze and identify the enabling technology that, the collaboration of different stakeholders into the sharing and transferring of healthcare data.	CO6-Ana

PART – B (5 x 16= 80 Marks)

11.	(a)	Apply the concept of block chain technology in real-life by comparing several real-time cases.	CO2-App	(16)
		Or		
	(b)	Identify two major benefits of using block chain in cyber security and the security challenges faced in Block chain.	CO2-App	(16)

12.	(a)	Discuss how Global Bling could adjust the amount of bitcoin that Vantage Mines paid for the diamond in Transaction and whether it would belong to the same chain.	CO3-App	(16)
		Or		
	(b)	Provide three reasons for why block chain is an improvement to the current system of data security and data transfer.	CO3-App	(16)
13.	(a)	Distinguish stable coins and decentralized cryptocurrencies.	CO1-U	(16)
		Or		
	(b)	Discuss how CBDCs differ from other stable coins.	CO1-U	(16)
14.	(a)	Analyze and how to develop an alternative block chain by apply the concept of Block chain technology.	CO6-Ana	(16)
		Or		
	(b)	Provide a solution (Block chain business model) that can help customers gain more control over their personal information by connecting them to a network of businesses such as banks, financial institutions and healthcare organizations who will alert users when any transaction is attempting to access or use their social security number.	CO6-Ana	(16)
15.	(a)	Analyze the performance of "LOYYAL" business innovation model with block chain and smart contract technology.	CO6-Ana	(16)
		Or		
	(b)	Analyze the need for predefined mechanisms and rules to modify a transparency into the diamond market as well as on eliminating criminal activity.	CO6-Ana	(16)