G.R. No.	

DECEMBER 2021 - ENDSEM EXAM FINAL YEAR B. TECH. (INFORMATION TECHNOLOGY) (SEMESTER - I)

PROFESSIONAL ELECTIVE-IV COURSE NAME: FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY COURSE CODE: ITUA40181B

(PATTERN 2018)

Time: [1 Hour] [Max. Marks: 30]

Instructions to candidates:

- 1) Answer Q.1 OR Q.2, Q.3 OR Q.4, Q.5 OR Q.6.
- 2) Figures to the right indicate full marks.
- 3) Use suitable data wherever required

Q.1 a	List down different tools within Ethereum Ecosystem along with	[4
	their purpose and use.	[-
Q.1 b	Make use of MyEtherwallet example to explain the Ethereum Account concept.	[6]
	OR	
Q.2 a	Explain following datatypes in Solidity programming with example. i)Enum ii) Mapping	[4]
Q.2 b	Organise elements of Ethereum tool stack as per their application.	
Q.3 a	Identify distinguishing features of Hyperledger fabric over traditional blockchain.	[6] [4]
Q.3 b	Prepare list of different components of Hyperledger fabric with is significance.	[6]
	OR	
Q.4 a	Develop a simple HelloWorld chaincode program using GO language.	[4]
Q.4 b	Set up a fabric network with three organizations.	[6]

Q.5 a	Predict improvements in finance domain use cases by utilization of	[4
	blockchain technology.	
Q.5 b	Design a blockchain based solution to implement supply chain	[6
	traceability of grapes.	
	OR	
Q.6 a	Justify how blockchain based application in Real estate are more	[4
	secure.	
Q.6 b	Apply IOT, AI and blockchain to build a robust solution such as	[6
	autonomous driving car.	