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PAPER CODE	U482-251B(ES E)
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MAY 2022 (ENDSEM) EXAM
FINAL YEAR B. TECH. (INFORMATION TECHNOLOGY)
(SEMESTER - II)
PROFESSIONAL ELECTIVE-IV
COURSE NAME: FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY
COURSE CODE: ITUA40181B
(PATTERN 2018)

Time: [1 Hour]

[Max. Marks: 30]

Instructions to candidates:

1. Figures to the right indicate full marks.
2. Answer Q.1 OR Q.2, Q.3 OR Q.4, Q.5 OR Q.6.
3. Use of scientific calculator is allowed
4. Use suitable data wherever required

- Q.1 a) Explain smart contracts and their use in blockchain. [4]
b) Demonstrate the interaction of smart contract with EVM. [6]

OR

- Q.2 a) Organise elements of Ethereum tool stack as per their application. [4]
b) Describe various datatypes in Solidity programming with example. [6]
Q.3 a) Draw and explain the FABCAR use case implementation with the help of state diagram. [4]
b) Prepare list of different components of Hyperledger fabric with its significance. [6]

OR

- Q.4 a) What are different components of Hyperledger fabric? [4]
b) Set up a fabric network with two organizations. [6]
Q.5 a) Justify how Blockchain is Revolutionizing the Traditional Business Network? Explain with example. [4]
b) Provide an example of how blockchain can benefit consumers. [6]

OR

- Q.6 a) Provide three reasons for why blockchain is an improvement to the current system of data security and data transfer. [4]
- b) Explain how a blockchain enabled supply chain creates advantages for providing better product tracing, reducing counterfeiting, and eliminating shipping trade partners, and intermediaries. [6]