[6181]-365

B.E. (AI & ML)

BLOCKCHAIN TECHNOLOGY

(2019 Pattern) (Semester - VII) (Elective - III) (418544B)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*

2) *Neat diagrams must be drawn wherever necessary.*

3) *Figures to the right side indicate marks.*

4) *Assume suitable data, if necessary.*

Q1) a) List down different tools in Ethereum Ecosystem along with their purpose and use. **[9]**

b) Explain following datatypes in Solidity programming with example. **[9]**

    i) Enum

    ii) Mapping

    iii) Address

OR

Q2) a) What is wallet? Make use of MyEtherwallet example to explain the Ethereum Account concept. **[9]**

b) Organise elements of Ethereum tool stack as per their application. **[9]**

Q3) a) Identify distinguishing features of Hyperledger fabric over traditional blockchain. **[8]**

b) Prepare list of different components of Hyperledger fabric with is significance. **[9]**

OR

Q4) a) Set up a fabric network with two organizations. **[8]**

b) Differentiate between the Ethereum and Hyperledger platforms. **[9]**

Q5) a) Differentiate between : [8]

- Fungible Token vs. Non-Fungible Token

- Cardano (ADA) vs. Riiple (XRP)

b) Explain in detail types of Cryptocurrecies and Tokens. [6]

c) Describe features of Tokens. [4]

OR

Q6) a) Describe the Consensus mechanism in brief. [7]

b) Explain the Proof of Activity consensus algorithm. [5]

c) Write a short note on i) Proof of Work ii) Proof of Activity [6]

Q7) a) What are the main features of a blockchain platform? [8]

b) What is the role of the blockchain platform in the business? [9]

OR

Q8) a) Short Note : [8]

i) Ransomware

ii) Money Laundering

b) What determines the adoption rate of a specific blockchain technology?[4]

c) What are the benefits of Blockchain in various scenarios? [5]

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