

B.Tech IV Year I Semester (R20) Regular Examinations December/January 2024

BLOCKCHAIN TECHNOLOGY AND APPLICATIONS

(Common to IT, AI&DS, CSE (AI), CSE (AI&ML), CSE (DS), CSE (IOT) and CSE)

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

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| (a) What is Blockchain? | 2M |
| (b) What are the different areas of blockchain technology? | 2M |
| (c) What is consensus? | 2M |
| (d) What is a currency token? | 2M |
| (e) What are the different obstacles for use of block chain? | 2M |
| (f) How cryptographic tokens work? | 2M |
| (g) What is Ethereum? | 2M |
| (h) What is truffle? | 2M |
| (i) What is Hyper ledger fabric? | 2M |
| (j) What is an Initial Coin Offering (ICO)? | 2M |

PART – B

(Answer all the questions: 05 X 10 = 50 Marks)

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| 2 (a) Explain decentralized applications of blockchain in detail. | 5M |
| (b) Explain stages in blockchain evolution in brief. | 5M |
| OR | |
| 3 (a) Elaborate types of players in blockchain ecosystem. | 5M |
| (b) Discuss features of consortium blockchain. | 5M |
| 4 (a) Elaborate structure of a block. | 5M |
| (b) Elaborate life cycle of blockchain transaction. | 5M |
| OR | |
| 5 (a) Explain different types of blockchain nodes. | 5M |
| (b) How to use blockchain for data storage? | 5M |
| 6 (a) Explain hybrid blockchain with its advantages and disadvantages. | 5M |
| (b) Elaborate blockchain relevance evaluation framework. | 5M |
| OR | |
| 7 (a) Discuss obstacle for use of block chain. | 5M |
| (b) Discuss four applications of blockchain. | 5M |
| 8 (a) Explain tuna fish tracking use case in brief. | 5M |
| (b) Elaborate Ethereum Virtual Machine in detail. | 5M |
| OR | |
| 9 (a) Explain my ether wallet in brief. | 5M |
| (b) What are the different applications of smart contract? | 5M |
| 10 (a) Explain in detail about hyperledger fabric transaction flow. | 5M |
| (b) Explain Inter planetary File System in brief. | 5M |
| OR | |
| 11 (a) Elaborate FabCar use case implementation in brief. | 5M |
| (b) How does IOT work with blockchain? Explain benefits of blockchain in IOT. | 5M |
