



**C20-CAI-505**

**7690**

**BOARD DIPLOMA EXAMINATION, (C-20)  
OCTOBER/NOVEMBER—2023  
DCAI – FIFTH SEMESTER EXAMINATION**

**BLOCKCHAIN TECHNOLOGIES**

*Time : 3 Hours ]*

*[ Total Marks : 80*

**PART—A**

**3×10=30**

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List blockchain characteristics.
2. List the applications of blockchain.
3. Define finalizing block.
4. State the importance of Merkle Tree in blockchain.
5. What is the importance of cryptographic tokens?
6. State the importance of architecture considerations.
7. Define ethereum blockchain.
8. What is the need of ethereum ecosystem?
9. State the purpose of hyperledger fabric.
10. What is the need of usecase?

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **eight** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

**11.** (a) Explain the types of blockchain.

**(OR)**

(b) Explain the features of public blockchain environments.

**12.** (a) Draw and explain the life cycle of blockchain transaction.

**(OR)**

(b) Explain the role of data storage on blockchain.

**13.** (a) Illustrate typical solution architecture for enterprise usecases.

**(OR)**

(b) Explain the architecture with blockchain platform.

**14.** (a) List and explain the steps involved to build on ethereum blockchain.

**(OR)**

(b) Explain ethereum ecosystem.

**15.** (a) Explain the usecase of car ownership tracking.

**(OR)**

(b) Illustrate usecase of post-trade processing in financial services.

**PART—C**

10×1=10

- Instructions :** (1) Answer the following question.  
(2) The question carries **ten** marks.  
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

**16.** Explain all steps involved to create a new MyEtherWallet.

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