

Code No: R18A0530

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech - II Semester Advance Supplementary Examinations, June 2023**Parallel and Distributed Computing**

(CSE)

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1 **A** Write the issues present in parallel and distributed paradigms [7M]
 B What are the Applications and challenges of Parallel and Distributed [7M]
 Computing

OR

- 2 Explain about the different Trends in Microprocessor Architectures [14M]

SECTION-II

- 3 Discuss about Decomposition Techniques in Parallel Algorithm Design [14M]

OR

- 4 Demonstrate about Block Array Distribution Schemes with examples [14M]

SECTION-III

- 5 Explain the Performance Metrics for Parallel Systems with examples [14M]

OR

- 6 **A** What is the Effect of Granularity on Performance [7M]
 B Explain how to Building Granularity with a suitable example [7M]

SECTION-IV

- 7 **A** What are the Issues in Sorting on Parallel Computers [7M]
 B Write about Parallel Formulation in detail [7M]

OR

- 8 Write and explain about Quick Sort Algorithm with an example [14M]

SECTION-V

- 9 Explain about Sequential Search Algorithms with examples [14M]

OR

- 10 Discuss in detail about BFS and DFS with neat diagrams. [14M]

Code No: R18A0534**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY****(Autonomous Institution – UGC, Govt. of India)****IV B.Tech - II Semester Advance Supplementary Examinations, June 2023****Block Chain Technology****(CSE & IT)**

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

1 A Write the Current block chain uses? What are the Future block chain applications? [7M]

B Discuss about the Major Components of CAP Theorem? [7M]

OR

2 A Differentiate Centralized and Decentralized systems? [7M]

B Correlate CAP Theorem and Block Chain? [7M]

SECTION-II

3 A Discuss about Private Key Cryptography? [7M]

B Discuss about Bit coin improvement proposals. [7M]

OR

4 A Write the importance of Public and Private Keys in Cryptography? [7M]

B Write about consensus algorithms. [7M]

SECTION-III

5 A What is wallet in Bit coin? Explain in detail about different types of wallets. [7M]

B Classify Different types of transactions in Bit coins? [7M]

OR

6 A Write the Procedures For Setting up a Bit Coin Node. [7M]

B Explain About various Bit Coin improvement proposals. [7M]

SECTION-IV

7 A List Various precompiled contracts in Ethereum? Discuss about them? [7M]

B What are the main building blocks of the Ethereum block chain? Explain? [7M]

OR

8 A How Messages are transferred by using Yellow Paper? [7M]

B Discuss about the Ethereum Network? [7M]

SECTION-V

9 A Draw and Discuss about Hyper ledger reference architecture? [7M]

B Write the steps to create a Saw tooth network? [7M]

OR

10 A How to handle consensus on blocks of identifiers? Discuss? [7M]

B What are the Key components in Corda Architecture? Elaborate them? [7M]

Code No: R18A0529**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**
(Autonomous Institution – UGC, Govt. of India)**IV B.Tech - II Semester Advance Supplementary Examinations, June 2023****Big Data Analytics**
(CSE)

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Time: 3 hours**Max. Marks: 70****Note:** This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1** **A** Differentiate Data Warehouse and Hadoop Environment [7M]
 B Define Big Data Analytics. Explain Classification of Analytics in detail. [7M]
- OR
- 2** **A** What are the Challenges of Big Data Analytics? And explain why is it [7M]
 important?
 B Define Data Science. Illustrate Basically Available Soft State Eventual [7M]
 Consistency in detail.

SECTION-II

- 3** **A** Explain the architecture of Hadoop Distributed File System in detail. [7M]
 B Explain Processing Data with Hadoop in detail. [7M]
- OR
- 4** **A** Describe Hadoop Ecosystem in detail. [7M]
 B Explain Hadoop in detail. [7M]

SECTION-III

- 5** **A** List and explain the Terms used in RDBMS and Mongo DB. [7M]
 B What is CQLSH? Explain its commands. [7M]
- OR
- 6** **A** Explain the purpose of Keyspaces in Cassandra. [7M]
 B How to use a counter? Explain Querying System Tables in detail. [7M]

SECTION-IV

- 7** **A** Explain MapReduce – Partitioner. [7M]
 B List and explain Data Types used in Hive. [7M]
- OR
- 8** **A** Explain Aggregations, Group by and Having with examples. [7M]
 B Explain Hive User Defined Functions with examples. [7M]

SECTION-V

- 9** **A** Illustrate Apache Pig Architecture with a neat sketch. [7M]
 B Explain Apache Pig Eval Functions in detail. [7M]
- OR
- 10** **A** Explain Apache Pig Relational Operators in detail. [7M]
 B Write word count program using Pig. [7M]
