

## Faculty of Science

## B.Sc(Data Science) III-Year, CBCS–VI Semester Regular Examinations –June, 2023

## PAPER: Big Data

Time: 3 Hours

Max Marks: 80

## Section-A

I. Answer any *eight* of the following questions (8x4=32 Marks)

1. Specify the Elements of Big Data.
2. What are the features of cloud computing?
3. Write a short note on Parallel Computing for Big Data.
4. What are Hadoop Functions?
5. What are Name Nodes and Data Nodes?
6. Write a short note on Oozie.
7. Write the Techniques to Optimize MapReduce Jobs.
8. Write the Characteristics of HBase.
9. Write a short note on Big Data Stack.
10. What is polyglot persistence?
11. Write a short note on CAP Theorem.
12. Write the Characteristics of NoSQL.

## Section-B

II. Answer the following questions (4x12=48 Marks)

13.(a) What are Big Data Analytics? Describe the advantages of Big Data Analytics.

(OR)

(b) Explain various Cloud Deployment models.

14.(a) What is HDFS? Explain the concept of Blocks in HDFS Architecture.

(OR)

(b) Describe the Features and Architecture of HBase.

15.(a) Describe the Map Reduce Framework. And explore the features of Map Reduce.

(OR)

(b) Explain about the Ingestion Layer and Storage Layer of Big Data Technology.

16.(a) What are Non-Relational Databases? Discuss the Issues with them.

(OR)

(b) Describe any Two NoSQL Data Models.

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