



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 6th Semester Examination, 2023

CMSADSE04T-COMPUTER SCIENCE (DSE3/4)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

GROUP-A

1. Answer any *four* questions from the following: 2×4 = 8
- (a) What is HDFS?
 - (b) Define BIG Data.
 - (c) What is sequence file in Hadoop?
 - (d) Why MongoDB is used?
 - (e) What do you mean by Bootstrapping?
 - (f) What do you mean by Sampling?
 - (g) Define any two characteristics of BIG Data.

GROUP-B

Answer any *four* questions from the following

8×4 = 32

2. (a) What is MongoDB? Write three key features of it. 2+3
- (b) What are the limitations of Hadoop? 3
3. (a) What is Hadoop? Explain its components. 4
- (b) Explain Mapper and Reducer class. 4
4. (a) What is YARN (Yet Another Resource Negotiator) and its role in Hadoop? 4
- (b) What are the benefits of using NoSQL databases? 4
5. (a) What is intelligent data Analysis? 4
- (b) Define the different inferences in Big Data analysis. 4
6. What is Cluster? Explain the setting up a Hadoop Cluster. 8
7. (a) What are the five 'V's of Big Data? 4
- (b) What are the different file formats that can be used in Hadoop? 4
8. Write short notes on: (any *two*) 4+4
- (a) Big data in healthcare
 - (b) Privacy considerations while dealing with big data
 - (c) NoSQL.

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