



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 6th Semester Examination, 2021

CMSADSE04T-COMPUTER SCIENCE (DSE3/4)

BIG DATA

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..

1. Answer any **four** questions from the following: 2×4 = 8
- (a) State two characteristics of big data application.
 - (b) Write down the four computing resources of Big Data Storage.
 - (c) Define HDFS. What are the different components of HDFS?
 - (d) What is throughput in Big Data?
 - (e) How is Hadoop different from other parallel computing systems?
 - (f) What is Sequence File in Hadoop?

Answer any four questions from the following 8×4 = 32

2. What is Big Data? How is HADOOP related to Big Data? Describe the main features of a big data in detail. 2+2+4
3. What is meant by Hadoop Streaming? Explain Hadoop streaming with an example. 3+5
4. What is the difference between Hadoop and Traditional RDBMS? Explain HADOOP architecture and how it works. 4+4
5. What would be the overall goals of big data in healthcare? Explain. How Big Data helps to identify risks and reduce fraud in Healthcare? 3+5
6. Explain the different tools to extract Big Data. What is NoSQL? Explain four types of NoSQL in brief. 3+1+4
7. Explain any one of the Hadoop components. Key value Database is different from Document database. Explain. 4+4

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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