21P452

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Name: .....

Reg.No: .....

# FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2023

### (CBCSS - PG)

(Regular/Supplementary/Improvement)

#### CC19P CSS4 E03e - FUNDAMENTALS OF BIG DATA

(Computer Science)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

# Part-A

Answer any *four* questions. Each question carries 2 weightage.

- 1. Elaborate the 5 V's in Big Data.
- 2. Elaborate layer 0 of Big Data stack.
- 3. What are the characteristics of big data analysis?
- 4. Explain with examples to navigate, insert and query data in MongoDB.
- 5. Mention various aggregation commands used in MongoDB.
- 6. Explain Hadoop streaming.
- 7. Explain the wrapper class in Hadoop.

 $(4 \times 2 = 8 \text{ Weightage})$ 

## Part-B

Answer any *four* questions. Each question carries 3 weightage.

- 8. Explain graph databases and spatial databases with example.
- 9. Mention NLP analysis on text at different levels.
- 10. Mention different NoSQL databases.
- 11. Explain the features of MongoDB.
- 12. Mention how to reference a database
- 13. Explain HDFS architecture.
- 14. Explain the Hadoop Java API for MapReduce.

 $(4 \times 3 = 12 \text{ Weightage})$ 

### Part-C

Answer any *two* questions. Each question carries 5 weightage.

15. Define Big Data .Explain its dimensions and different types of data.

- 16. Define Big Data Analytics. Explain its types.
- 17. Short notes on a) Flume b) Zookeeper c) Hbase d) Lucene e)Avro
- 18. What is MapReduce? Explain Hadoop Java API for MapReduce.

 $(2 \times 5 = 10 \text{ Weightage})$ 

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