D4ACS2001 **(1 Page)** **Name.....**
Reg.No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2022

COMPUTER SCIENCE
FCSS4E03-FUNDAMENTALS OF BIG DATA

Time: 3 Hours **Maximum Weightage: 30**

Section A: Short answer questions. Answer any *four* questions. Each carries *two* weightage.

1. List out various dimensions of Big Data.
2. Write a short note on spatial database.
3. Expand and explain ETL.
4. What is aggregation commands in mongoDB?
5. What are Collections? Explain how collections are renamed in mongoDB.
6. Why warehousing is important in Data management?
7. What is the advantage of using key/value pair in data management?

(4×2 = 8 weightage)

Section B: Short essay questions. Answer any *four* questions. Each carries *three* weightage.

8. What are the differences between structured data and unstructured data?
9. Explain the concepts behind NoSQL.
10. How do you justify R as an efficient tool for data analysis?
11. Write down the usages of $slice, $size, $exists, $type, $elemMatch.
12. What are the differences between Pig and Pig Latin?
13. Explain architecture of HDFS.
14. Briefly explain wrapper classes.

(4×3 = 12 weightage)

Section C: Essay questions. Answer any *two* questions. Each carries *five* weightage.

15. Explain in detail with suitable examples about four V's of Big Data.
16. Explain the role of efficient Data analysis methodologies in Big Data.
17. Discuss the configuration and implementation strategies of MongoDB.
18. Explain in detail the role of Map Reduce algorithm in Managing Big Data.

(2×5 = 10 weightage)