FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024
(Regular/Improvement/Supplementary)

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. What are the importance of Bigdata?

2. Write a note on document database. List its types.

3. Explain the features of Google prediction API.

4. List any four features of NoSQL databases.

5. What Jaql? Explain its features.

6. What are sources, decorators, and sinks in Flume?

7. Write the general structure of reducer class.

(4 × 2 = 8 weightage)

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

8. Explain the role of distributed computing in Bigdata environment.

9. What are the modifications to be made to business intelligence products to handle Bigdata?

10. What are the important considerations to be taken in selecting a big data analysis framework?

11. What is MongoDB? Explain its advantages over a conventional RDBMS.

12. Explain the MongoDB data model.

13. Write a detailed note on Hadoop Common Components.

14. List and explain various map wrapper classes in Hadoop.

(4 × 3 = 12 weightage)

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

15. List and explain the four dimensions of Bigdata.

16. Explain about text analytics and extraction techniques.

17. Write notes on - $inc, $set, $unset, $push, $pushAll -and $addToSet.

18. With the help of a diagram, explain the basic principles of MapReduce operations.

(2 × 5 = 10 weightage)