



ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU -27
BCA (DATA ANALYTICS) - VI SEMESTER
SEMESTER EXAMINATION: APRIL 2024
 (Examination conducted in May / June 2024)
BCADA6123 : ENABLING TECHNOLOGIES FOR DATA SCIENCE

(For current batch students only)

Time: 2 Hours

Max Marks: 60

This paper contains one printed page and three parts

PART-A

Answer **ALL** the questions

5 x 2 = 10

1. Name the datatypes in Pig.
2. When do we use Map Reduce mode in Hive?
3. How many reducers will work when a sqoop job runs?
4. What are the core components of Hadoop?
5. Where the table does get stored by default in hive? Write a complete path.

PART-B

Answer any **FIVE** questions

5 x 4 = 20

6. Explain briefly about big data characteristics.
7. What are the important components of Spark Ecosystem?
8. Explain the concept of replication in Hadoop Ecosystem.
9. Explain the types of operations supported by RDDs.
10. What are the exception handling operators in Pig script?
11. Explain different phases of Map Reduce program.
12. Define the three key design principles of pig latin.

PART-C

Answer any **THREE** questions

3 x 10 = 30

13. Explain about the processing of a job in Hadoop with a neat sketch.
14. What are the different phases of Map Reduce program and explain it with Word Count?
15. What are the components of YARN? Explain each component functionality with neat diagram?
16. Explain the operators supported by pig with respect to data access, transformations and debugging operations.