



**POORNIMA UNIVERSITY, JAIPUR**  
**END SEMESTER EXAMINATION, 2023-2024 EVEN SEMESTER**

Write Roll No Below: \_\_\_\_\_

BCA (ALL) II ( ) - IV Sem (Main/Back) End Semester Examination,  
**BCACCA4101: Big Data Analysis**

**Time:** 3 Hours

**Total Marks:** 60

**Min. Passing Marks:** 21/24/27

**Question Paper ID:** 001353

**Instructions:** Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

**Bloom Level(BL):** 1-Remembering, 2-Understanding, 3-Appling, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

- |            |            |  |              |           |           |
|------------|------------|--|--------------|-----------|-----------|
| <b>Q1.</b> | <b>(a)</b> | (i) What is Big Data? Describe its Role in Today life? <b>(Marks 6)</b><br>(ii) What is a MapReduce? Explain the MapReduce Programming. <b>(Marks 6)</b><br><b>(OR)</b>          | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            |  | 12           | 1         | 1         |
|            | <b>(b)</b> | (i) What are the basic features of Big Data Platform? <b>(Marks 6)</b><br>(ii) List out the main characteristic of Big Data? <b>(Marks 6)</b>                                    |              |           |           |
| <b>Q2.</b> | <b>(a)</b> | (i) What is Hadoop? Define its advantage Hadoop. <b>(Marks 6)</b><br>(ii) Define the properties of data? Also explain the types of data. <b>(Marks 6)</b><br><b>(OR)</b>         | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            |  | 12           | 1         | 2         |
|            | <b>(b)</b> | (i) What you mean by HDFS? Define the concept of HDFS. <b>(Marks 6)</b><br>(ii) What is interfaces in HDFS? Define the various type interfaces. <b>(Marks 6)</b>                 |              |           |           |
| <b>Q3.</b> | <b>(a)</b> | (i) What is Map-Reduce and how it relates to Big Data? <b>(Marks 6)</b><br>(ii) What are the parameter of Map Reduce Program? <b>(Marks 6)</b><br><b>(OR)</b>                    | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            |  | 12           | 1         | 3         |
|            | <b>(b)</b> | (i) What are the key differences between Pig vs MapReduce? <b>(Marks 6)</b><br>(ii) How to set which framework would be used to run MapReduce program? <b>(Marks 6)</b>          |              |           |           |
| <b>Q4.</b> | <b>(a)</b> | (i) What is PIG? Explain the Execution mode of PIG. <b>(Marks 6)</b><br>(ii) Differentiate Between Pig and Map-Reduce in Details? <b>(Marks 6)</b><br><b>(OR)</b>                | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            |  | 12           | 1         | 4         |
|            | <b>(b)</b> | (i) What is Hive? Define its Role. <b>(Marks 6)</b><br>(ii) Define the Architecture of Hive? <b>(Marks 6)</b>  |              |           |           |
| <b>Q5.</b> | <b>(a)</b> | (i) What Apache? how to user can handle data . <b>(Marks 6)</b><br>(ii) Describe the Zookeeper? <b>(Marks 6)</b><br><b>(OR)</b>  | <b>Marks</b> | <b>BL</b> | <b>CO</b> |
|            |            |  | 12           | 1         | 5         |
|            | <b>(b)</b> | (i) What is 'R' Programing? Define different Data Structure in 'R' . <b>(Marks 6)</b><br>(ii) What is a package in R, and how do you install and load packages? <b>(Marks 6)</b> |              |           |           |
- \*\*\*End of Question Paper\*\*\*