ECHELON INSTITUTE OF TECHNOLOGY

Department of Computer Application

# Assignment No– 2: Odd Semester 2023-24

Course: BCA-DS Session: 2023-24

Date of Issue: 6-11-24 Date of Submission: 11-11-24

Subject-Big Data Course Code- BCA-DS-301

Course Unit included: 3,4 Max. Marks: 30

# Course Outcomes:

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| **CO3** | Derive business benefits from unstructured data |
| **CO4** | Learn the architectural concepts of Hadoop and introducing map reduce paradigm |

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| **S. no** | **Question** | **Course Outcome** | **Revised Bloom Taxonomy**  **Level** | **Mark s** |
| Q1 | **What are the main components of the Hadoop framework, and what roles do they play in managing big data?** | CO 3 | RBTL-2 | 5 |
| Q2 | **Explain the structure and functionality of the Hadoop Distributed File System (HDFS).** | CO 3 | RBTL-1 | 5 |
| Q3 | **Provide an overview of the MapReduce programming model and its significance in processing large datasets.** | CO 4 | RBTL-2 | 5 |
| Q4 | **What is the role of driver code in a MapReduce job, and how does it interact with mapper and reducer codes?** | CO 4 | RBTL-2 | 5 |
| Q5 | **What is the role of Secondary Namenode in Hadoop, and how does it differ from the primary Namenode?** | CO 3 | RBTL-2 | 5 |
| Q6 | **How do Job Tracker and Task Tracker work together in a Hadoop cluster?** | CO 3 | RBTL-2 | 5 |
| **Q7** | **Describe the role of Combiner and Partitioner in optimizing MapReduce jobs.** | CO 4 | RBTL-2 | 5 |
| **Q8** | **What are the sorting and shuffling phases in MapReduce, and why are they important?** | CO 4 | RBTL-2 | 5 |