**Section A**

1. Provide a diagram of Hive architecture and explain its main elements.
2. What is Big Data? Describe the three fundamental aspects that define it.
3. What are the key differences between a Data Lake and a Data Warehouse?
4. What are the different types of NoSQL databases? Write a brief note.
5. Draw Spark architecture and explain its various components.
6. Explain partitioning (in Hive) with an example.
7. List any 2 differences between Coalesce and Repartition (in Spark).
8. List two primary differences between Hadoop version-2 and Hadoop version-3.
9. What is a Hive metastore? Can NoSQL Database – Hbase be configured as Hive metastore?
10. Using an example, depict how MapReduce computes word count.
11. What is cap theorem? Where does MongoDB stands in cap theorem?

**Section B**