B   **L2B003**   **Pages:1**

Reg. No._____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SECOND SEMESTER MCA (LATERAL ENTRY) DEGREE EXAMINATION, MAY 2017
Course Code: RLMCA 204
Course Name: BIG DATA TECHNOLOGIES

Max. Marks: 60   Duration: 3 Hours

PART A
Answer all questions. Each question carries 3 marks.

1. How is analysis of Big Data useful for organizations?

2. What is metadata? What information does it provide? How it helps in a Hadoop environment?

3. Explain Sharding and Replication

4. List the elements used by Hive to organize data?

5. Explain the working of MapReduce

6. What are NewSQL Databases ?

7. When is an IMDG storage device appropriate?

8. When is a Heat Map used?

PART B
Each question carries 6 marks.

9. a. Explain the functioning of ingestion layer Big data architecture.

   Or

   b. How Cloud Computing supports Big Data?

10. a. How Batch Processing can be done with MapReduce ?

    Or

    b. Explain ACID and BASE theorems.

11. a. How does HDFS ensure data integrity in a Hadoop cluster?

    Or

    b. Explain the involvement of Hadoop elements at various stages of Data Processing?

12. a. How MapReduce jobs can be optimized?

    Or

    b. List the main features of MapReduce.

13. a. Explain the types of NoSQL storage devices.

    Or

    b. Briefly explain the In-Memory Storage devices?

14. a. Explain Statistical Analysis and its types?

    Or

    b. How Machine Learning helps in Data Mining?