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21CS71

Seventh Semester B.E./B.Tech Degree Examination, Dec.2024/Jan.2025
Big Data Analytics

Time: 3 hrs.

Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1	a.	Discuss the evolution of Big Data.	(06 Marks)
	b.	Explain the characteristics of Big Data.	(04 Marks)
	c.	Explain Data Architecture Design, with a neat diagram.	(10 Marks)

OR

2	a.	Explain Analytics Scalability to Big Data and Massive parallel processing platforms.	(12 Marks)
	b.	Explain Big Data Analytics applications with one case study.	(08 Marks)

Module-2

3	a.	List and explain the core components of Hadoop.	(10 Marks)
	b.	Explain Hadoop Distributed File System.	(10 Marks)

OR

4	a.	Define MapRedeuce Frame work and its functions.	(06 Marks)
	b.	Explain steps on the request to MapReduce and the types of process in MapReduce.	(10 Marks)
	c.	Explain in brief on Flume Hadoop Tool.	(04 Marks)

Module-3

5	a.	Explain about No SQL datastore and its characteristics.	(10 Marks)
	b.	Describe the principle of working of the CAP theorem.	(10 Marks)

OR

6	a.	Demonstrate the working of key- value store with an example.	(10 Marks)
	b.	Describe the features of MongoDB, and its industrial application.	(10 Marks)

Module-4

7	a.	Explain the process in MapReduce when client submitting a job, with a neat diagram.	(10 Marks)
	b.	Explain Hive Integration and workflow steps involved with a diagram.	(10 Marks)

OR

8 a. Using HiveQL for the following :
      i) Create a table with partition
      ii) Add, rename and drop a partition to a table.   **(10 Marks)**
    b. What is PIG in BigData? Explain the feature of PIG.   **(10 Marks)**

Module-5

9 a. Explain linear and non-linear relationship with essential graphs in machine learning.
        (10 Marks)
    b. Write the block diagram of text mining process and explain its phases.   **(10 Marks)**

OR

10 a. With a neat diagram, write the steps in K-means clustering.   **(10 Marks)**
    b. Explain the purpose of web usage analytics and the significance of web graphs.   **(10 Marks)**

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