

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: Big Data Analytics****Sub. Code: 56519****Day and Date: Friday ,05-12-2025****Total Marks: 70****Time: 02:30 PM To 05:00 PM****Instructions:** 1. Assume suitable data wherever necessary and mention it boldly
2. Figures to the right indicate full marks**Special Inst.:** 1. Question no. 6 is compulsory
2. Solve any four questions from Q. No. 1 to Q. No. 5**Q1) [15]**

- a. Explain the term Big Data with suitable examples. How does it differ from traditional data? [8]
- b. Describe the core components of Hadoop architecture with neat diagram. [7]

Q2) [15]

- a. How Hive and Pig support data analytics in the Hadoop ecosystem. Compare HiveQL and Pig Latin. [8]
- b. Explain the role and applications of CouchDB in Big Data analytics. [7]

Q3) [15]

- a. Explain the advent of Spark and why it became necessary in Big Data analytics. [8]
- b. Describe the importance of cloud platforms in data science, with examples such as AWS, Azure, and Google Cloud. [7]

Q4) [15]

- a. Discuss the use of Redis for performance-driven storage, caching, and real-time processing. [8]
- b. Explain the architecture of Spark with a neat diagram. [7]

Q5) [15]

- a. What is NoSQL? Explain different types of NoSQL databases with examples. [8]

b. What is the use of YARN ? Explain with a suitable example and diagram.

[7]

Q6) Write short notes on any two

[10]

a. Big Data Mining

b. Sqoop

c. Silicon Valley and Data Science

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

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