

Seat No. **MAR_APR 2025 SUMMER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Big Data Analytics****Sub. Code: 56519****Day and Date: MAY ,07-05-2025****Total Marks: 70****Time: 10:30 AM To 01:00 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. Define Big Data Mining. Describe the key technical elements of a Big Data platform. [8]
- b. Compare and contrast Hive and Pig in terms of data processing and usability. [7]

Q2) [15]

- a. Describe any three tools from the Hadoop ecosystem and their purposes. [8]
- b. Why is NoSQL preferred in Big Data environments? Highlight key differences with traditional RDBMS. [7]

Q3) [15]

- a. What is R Shiny? Explain how it aids developers in building interactive data applications. [8]
- b. Explain the core components and architecture of Spark in detail. [7]

Q4) [15]

- a. What are Spark solutions? Discuss use cases where Spark is preferred over Hadoop. [8]
- b. Discuss machine learning and AI applications in enterprise data science. [7]

Q5) [15]

- a. Describe the structure and key features of MongoDB, CouchDB, and Redis. [8]
- b. Explain how Silicon Valley companies are leveraging Big Data for innovation. [7]

- Q6)** Write short note on any two a) Hadoop YARN b) Steps to use RStudio in the cloud [10]
c) Various sources of Big Data d) Sqoop

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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