

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: Big Data Analytics****Sub. Code: 67824/84719/84985****Day and Date: Monday ,08-12-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM**

- Instructions:**
- 1. All questions are compulsory**
 - 2. Draw neat labelled diagrams wherever necessary**
 - 3. Figures to the right indicate full marks**

- Q1)** Solve any two of following. **[14]**
- a.** What are the components of Spark architecture? **[7]**
 - b.** Define Big Data? Explain various V's characteristics of Big Data. **[7]**
 - c.** Explain Apache Spark RDD Operations in detail. **[7]**
- Q2)** Solve any two of following. **[14]**
- a.** Explain Data Analytics project life cycle stages. **[7]**
 - b.** With neat diagram explain the Product Knowledge Hub in Big Data. **[7]**
 - c.** What is Resilient Distributed Dataset (RDD)? Explain transformations and actions in RDD. **[7]**
- Q3)** Solve any two of following. **[14]**
- a.** What is recommendation algorithm? Explain different types of Recommendations Algorithms. **[7]**
 - b.** Explain the architecture of RHIPE. **[7]**
 - c.** Explain the HDFS and MapReduce architecture. **[7]**
- Q4)** Solve any two of following. **[14]**
- a.** Explain the architecture of RHadoop. **[7]**
 - b.** Explain Unstructured Data Analytics and Reporting. **[7]**
 - c.** Explain how data analytics problem for calculating the frequency of stock market changes can be solved using MapReduce. **[7]**

Q5) Solve any two of following.

- a. What is machine learning? Explain types of machine-learning algorithms. **[7]**
- b. What are Spark DataFrames? Why do we use them in Spark? **[7]**
- c. Explain the features of R Language. **[7]**

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.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

- 1] (1154) B.Tech. CBCS (84719) Big Data Analytics Part 4 SEM 8
- 2] (101) Bachelor of Engineering (84985) Big Data Analytics Part 4 SEM 8
- 3] (101) Bachelor of Engineering (67824) Data Analytics Part 4 SEM 8