Seat No.

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MAR_APR 2026 SUMMER EXAMINATION

1154 B.Tech. CBCS

Sub. Name: Big Data Analytics

Sub. Code: 67824/84719/84985

Day and Date: Saturday ,23-05-2026 **Total Marks: 70**

Time: 02:30 PM To 05:00 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. Explain the HDFS and MapReduce architecture. **[7]**

b. Why Spark is preferred over Hadoop? Explain the limitations of Hadoop? **[7]**

c. Explain Steps to generate recommendations in R. **[7]**

Q2) Solve any two of following. **[14]**

a. Explain the architectural components of Big Data? **[7]**

b. Explain the features of R Language. **[7]**

c. What is Resilient Distributed Dataset (RDD)? Explain transformations and actions in RDD. **[7]**

Q3) Solve any two of following. **[14]**

a. Explain steps to performing clustering with R and Hadoop. **[7]**

b. What is machine learning? Explain types of machine-learning algorithms. **[7]**

c. Define Big Data? Explain various V's characteristics of Big Data. **[7]**

Q4) Solve any two of following. **[14]**

a. What is a Directed acyclic graphs (DAG) in Spark, and how does it work? **[7]**

b. Explain the architecture of RHadoop. **[7]**

c. Write a note on: Drivers for Big Data. **[7]**

Q5) Solve any two of following. **[14]**

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a. Briefly explain the core components in Spark. **[7]**

b. Write steps to build and run the MapReduce algorithm with R and Hadoop integration for web page categorization problem. **[7]**

c. Explain Data Analytics project life cycle stages. **[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

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