

ADMISSION NUMBER											

## School of Business

Integrated Bachelor of Business Administration - Master of Business Administration  
Semester End Examination - Nov 2023

Duration : 180 Minutes  
Max Marks : 100

### Sem IX - MBBA6004 - Big Data Analytics

General Instructions

*Answer to the specific question asked*

*Draw neat, labelled diagrams wherever necessary*

*Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain the advantages of NoSQL databases. K1 (2)
- 2) Explain the components of the Hadoop ecosystem and their functions. K2 (4)
- 3) Create a set of advanced HiveQL queries to perform complex data manipulations and aggregations. K2 (6)
- 4) Design a security framework for protecting data stored in Hadoop and HBase from unauthorized access. K3 (9)
- 5) Discuss the security measures and data integrity in NoSQL database systems. K3 (9)
- 6) Create a project plan for implementing a real-time analytics platform using HBase and Spark. K5 (10)
- 7) Optimize the data storage and retrieval performance of Hadoop clusters with the help of caching mechanisms. K4 (12)
- 8) Evaluate the ethical considerations and potential risks associated with the widespread adoption of big data technologies. K5 (15)
- 9) How can Big Data improve customer experience in the retail industry? K5 (15)
- 10) Develop a comprehensive strategy to implement Spark and NoSQL for a real-world business application. K6 (18)