Name:.....
Roll No:.....

MAR ATHANASIUS COLLEGE OF ENGINEERING (AUTONOMOUS),

KOTHAMANGALAM - 686666

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.TECH SECOND SERIES EXAMINATION, OCTOBER 2026 (S7 CS,AIML)

CST 423 CLOUD COMPUTING

Max. Marks: 40 Duration: 1.5 Hours

PART A

Answer all questions. Each question carries 3 marks.

1. What is Pig Latin? Given a CSV file named abc.csv containing the attributes id, name, year, rating, and duration, Explain how to load the file into Apache Pig using Pig Latin. (CO3)
2. How are accumulators used in Apache Spark (CO3)
3. Define Cloud Infrastructure Security and explain its significance in protecting cloud-based resources and services. (CO4)
4. A user shares images through a cloud-based platform. Identify any three security risks that may arise from such image sharing. (CO4)

PART B

Answer all questions. Each question carries 14 marks.

5. (a) Write a Word Count Program in Hadoop using MapReduce? Explain. (CO3) (7 marks)
   (b) Explain the architecture of Eucalyptus Cloud with its mode of operation.(CO3) (7 marks)
6. (a) Compare and contrast the major privacy issues in cloud computing, and explain the measures that can be adopted to address these issues with suitable examples. (CO4) (7 marks)
   (b) A cloud service provider needs to ensure that only authorized users can access specific resources. Identify the mechanism used for managing user identities and controlling access, and Explain its role in cloud security. (CO4) (7 marks)

VISION

To mould competent computing professionals, innovators, and leaders guided by ethical values and committed to technological advancement and sustainable societal development.

MISSION

- Provide quality education through strong theoretical foundations, experiential learning, and exposure to emerging computing technologies.
- Cultivate critical thinking, research aptitude, and innovation through problem-based learning, industry interaction, and research initiatives.
- Foster ethical values, leadership, social responsibility, and an aspiration for lifelong learning through professional practices, teamwork, and mentoring.