PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 29-10-2025   **Time:** 02.30pm to 04.00pm

School: SOCSE	**Program:** B.Tech. CST-CDV	
Course Code : CDV3407	**Course Name:** AIOps – AI-Driven DevOps & IT Operations	
Semester: VII	**Max Marks**: 50	**Weightage**: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	24	-	-	-

Instructions:

    (i) Read all questions carefully and answer accordingly.

    (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.   **5Q x 2M=10M**

1	Explain how AIOps enhances DevOps.	2 Marks	L2	CO1
2	Recognize how time-series analysis detects anomalies in AIOps.	2 Marks	L1	CO2
3	Describe logs in telemetry?	2 Marks	L2	CO1
4	Recall how the pattern detection predicts incidents in AIOps.	2 Marks	L1	CO2
5	Outline the three pillars of observability to diagnose a slow webpage.	2 Marks	L2	CO1

Part B

Answer the Questions.   **Total Marks 40M**

6.	a.	Explain the evolution from traditional IT monitoring to AIOps and discuss the limitations it overcomes.	10 Marks	L2	CO1
	b.	Describe the three AIOps architectural layers—data sources, analysis, automation—and their functions.	10 Marks	L2	CO1
		Or			
7.	a.	Explain AIOps fundamentals, including its definition, evolution drivers, and application scope in IT.	10 Marks	L2	CO1
	b.	Identify the challenges and risks of implementing AIOps, including data quality, model accuracy, and integration complexity.	10 Marks	L2	CO1

8.	a.	Analyze how time-series analysis enables anomaly detection, forecasting, and proactive IT operations in AIOps.	10 Marks	L4	CO2
	b.	Compare pattern detection with anomaly detection in AIOps and analyze a real-world predictive example.	10 Marks	L4	CO2
		Or			
9.	a.	Examine Kafka's function in real-time event streams and analyze its impact on AIOps operations.	10 Marks	L4	CO2
	b.	Analyze a high-level AIOps architecture using Kafka and Fluentd, focusing on real-time insights and automated responses.	10 Marks	L4	CO2