PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 09-10-2025   **Time:** 09.30am to 11.00am

School: SOCSE	**Program:** B.TECH
Course Code : CDV3406	**Course Name:** AI POWERED CHATBOT AND AUTOMATION IN DEVOPS
Semester: V	**Max Marks**: 50 — **Weightage**:25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	**44**	**46**			

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	Differentiate between Rule-based and AI-based chatbots.	2 Marks	L2	CO1
2	What is the role of NLP in chatbots?	2 Marks	L2	CO1
3	What is intent classification in chatbot development?	2 Marks	L1	CO2
4	What role does API integration play in chatbot development?	2 Marks	L2	CO2
5	Define entity extraction in the context of chatbots.	2 Marks	L1	CO2

Part B

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

6.	a.	Explain the core components of chatbot architecture with a neat diagram.	10 Marks	L2	CO 1
	b.	Explain the architecture of AI assistants used in chatbots with a neat diagram.	10 Marks	L2	CO 2
		Or			
7.	a.	Describe the process of integrating conversational AI with real-world applications using APIs and databases.	10 Marks	L2	CO 1
	b.	Describe the process and importance of fallback strategies and error handling in chatbot development.	10 Marks	L4	CO 2

8.	a.	Discuss the importance of event classifiers and command interpreters in conversational AI with examples.	10 Marks	L4	CO 1
	b.	Discuss how API and database integration enhance chatbot capabilities. Provide examples.	10 Marks	L3	CO 2
		Or			
9.	a.	Explain the basics of NLP for chatbots. How does intent recognition and entity extraction work?	10 Marks	L2	CO 1
	b.	Explain the concepts of creating flows, actions, and context handling in chatbot development. Why are they important?	10 Marks	L2	CO 2