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PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 08-10-2025

Time: 11.45am to 01.15pm

School: SOCSE	Program: B.Tech. Computer Science and Technology (CDV)	
Course Code : CDV2507	Course Name: Kubernetes and Container Orchestration	
Semester: V	Max Marks: 50	Weightage: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	25	25			

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	What is namespace	2 Marks	L1	CO2
2	What are label and selectors	2 Marks	L2	CO2
3	List the tool used in containerization	2 Marks	L1	CO1
4	What is the use of Docker in DevOps?	2 Marks	L1	CO1
5	What is container runtime	2 Marks	L1	CO1

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Explain the key Components of container Architecture	5 Marks	L1	CO1
	b.	Explain core kubernetes components and function	5 Marks	L1	CO1

Or

7.	a.	Explain using the Secrets	5 Marks	L2	CO2
	b.	Explain How a Replicaset work	5 marks	L2	CO2

8.	a.	Explain in detail Master Components	08 Marks	L2	CO1
	b.	Explain in detail Node Components	07 Marks	L2	CO1

Or

9.	a.	Discuss any one tool used in containerization	08 Marks	L2	CO1
	b.	Why do we need container Orchestration		L1	CO1

10.	a.	Explain Kubernetes Pod	8 Marks	L2	CO2
	b.	Explain ReplicationController (RC)	7 Marks	L1	CO2

Or

11.	a.	Explain Deployment Strategies	8 Marks	L1	CO2
	b.	Explain in detail Configmap	7 Marks	L1	CO2