Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐

PRESIDENCY UNIVERSITY

BENGALURU
School of Computer Science Engineering
Mid - Term Examinations - November 2024

Semester: V

Course Code: CSE3046

Course Name: DevOps Tools and Internals

Program: B. Tech. – CSE (DevOps)

Date: 06-11-2024

Time: 09.30am to 11.00am

Max Marks: 50

Weightage: 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.   **5Qx2M=10M**

1	Define DevOps	2 Marks	L1	CO1
2	Summarize DevOps Culture and Practices	2 Marks	L1	CO1
3	Name the tools used in CI/CD process & testing phase.	2 Marks	L1	CO1
4	What is Registry in docker?	2 Marks	L1	CO2
5	How do you spin up a Docker container?	2 Marks	L1	CO2

Part B

Answer ALL Questions. Each question carries 10 marks.   **4QX10M=40M**

6	Explain the architecture of the DevOps with a neat diagram.	10 Marks	L2	CO1

Or

7	You are the project manager of an organization. A customer is approaching you to develop a project and he is not sure about the entire requirements and he may add new requirements when the development is in progress. Which development methodology you will propose and follow to develop this project? Explain the proposed model in detail.	10 Marks	L2	CO1

8	**8a.**	Develop the step by step procedure with proper syntax to create 2 files in working directory and move them to github account	5 Marks	L3	CO1
	8b.	Explain the difference between cloning and fork	5 Marks	L2	CO1

Or

9	**9a.**	Construct the procedure to manage the conflicts that arises during merging the two branches with correct syntax.	5 Marks	L3	CO1
	9b.	Sameer wants to use DevOps in his upcoming project and he is new to git & github. Explain the benefits of using Git and GitHub to him.	5 Marks	L2	CO1

10	**10a.**	Illustrate the difference between hypervisor and docker.	5 Marks	L2	CO2
	10b.	Explain the difference between the commands stop, kill and pause with respect to docker. Provide the correct syntax for all these 3 commands.	5 Marks	L2	CO2

Or

11	**11a.**	Compare image and containers in Docker	5 Marks	L2	CO2
	11b.	Explain briefly on Docker Daemon.	5 Marks	L2	CO2

12		Construct the procedure for building an image with Dockerfile. Explain the content of Dockerfile.	10 Marks	L3	CO2

Or

13		Develop the procedure for Pulling Docker Images and Spinning Containers	10 Marks	L3	CO2