Unit - 1

1. Design and implement a CI/CD pipeline for a Java application built using Maven. Use Git/GitHub for version control,Jenkins for pipeline execution ,and Docker for containerization. Deploy the containerized application on Docker Swarm and explain each stage of the pipeline during execution.
2. Design and implement a CI/CD pipeline for a Node.js simple app. Use Git/GitHub for version control,Jenkins for pipeline execution ,and Docker for containerization. Deploy the containerized application on Docker Swarm and explain each stage of the pipeline during execution.
3. Design and implement a CI/CD pipeline for a flask application. Use Git/GitHub for version control,Jenkins for pipeline execution ,and Docker for containerization. Deploy the containerized application on Docker Swarm and explain each stage of the pipeline during execution.

Unit - 2

1. Develop a Java application using Maven and implement a fully automated CI/CD pipeline using Git/Github.Jenkins and Docker.Configure Jenkins cron-based triggers to automatically initiate the pipeline-Containerize the application and deploy it on Docker Swarm.ExpIain each automated stage of the pipeline
2. Develop a simple node js application and implement a fully automated CI/CD pipeline using Git/Github.Jenkins and Docker.Configure Jenkins cron-based triggers to automatically initiate the pipeline-Containerize the application and deploy it on Docker Swarm.ExpIain each automated stage of the pipeline
3. Develop a Flask application and implement a fully automated CI/CD pipeline using Git/Github.Jenkins and Docker.Configure Jenkins cron-based triggers to automatically initiate the pipeline-Containerize the application and deploy it on Docker Swarm.ExpIain each automated stage of the pipeline

Unit - 3

1. Create a CI/CD pipeline for a Maven-based Java application using Git/GitHub,Jenkins , and Docker. Deploy the containerized application on a kubernetes cluster and demonstrate the execution of each pipeline stage.
2. Create a CI/CD pipeline for a react app using Git/GitHub,Jenkins , and Docker. Deploy the containerized application on a kubernetes cluster and demonstrate the execution of each pipeline stage,
3. Create a CI/CD pipeline for a flask application using Git/GitHub,Jenkins , and Docker. Deploy the containerized application on a kubernetes cluster and demonstrate the execution of each pipeline stage,

Unit - 4

1. Build a Java Application using Maven and configure a fully automated CI/CD pipeline with Git/GitHub,Jenkins and Docker,Use Jenkins cron jobs to trigger the pipeline automatically and deploy the application on Kubernetes.Explain all automated stages of the pipeline
2. Build a React application and configure a fully automated CI/CD pipeline with Git/GitHub,Jenkins and Docker,Use Jenkins cron jobs to trigger the pipeline automatically and deploy the application on Kubernetes.Explain all automated stages of the pipeline
3. Build a Flask Application and configure a fully automated CI/CD pipeline with Git/GitHub,Jenkins and Docker,Use Jenkins cron jobs to trigger the pipeline automatically and deploy the application on Kubernetes.Explain all automated stages of the pipeline