

Code: 23CS4601C, 23IT4601C

III B.Tech - II Semester - Regular Examinations – APRIL 2026**DEVOPS**
(Common for CSE, IT)

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
 2. Part-A contains 10 short answer questions. Each Question carries 2 Marks.
 3. Part-B contains 5 essay questions with an internal choice from each unit. Each Question carries 10 marks.
 4. All parts of Question paper must be answered in one place.

BL – Blooms Level

CO – Course Outcome

PART – A

		BL	CO
1.a)	List any four features of DevOps.	L1	CO1
1.b)	What is the Agile model?	L1	CO1
1.c)	List any four features of Git.	L1	CO2
1.d)	Define SonarQube.	L1	CO2
1.e)	Define Build Automation.	L1	CO3
1.f)	What is a Jenkins Pipeline?	L1	CO3
1.g)	What is Continuous Deployment?	L1	CO4
1.h)	List features of Selenium.	L1	CO4
1.i)	Define Configuration Management.	L1	CO4
1.j)	Define Namespace in Kubernetes.	L1	CO4

PART – B

			BL	CO	Max. Marks
UNIT-I					
2	a)	Compare and Contrast traditional SDLC and Agile model.	L4	CO1	5 M
	b)	Interpret the DevOps lifecycle stages.	L2	CO1	5 M
OR					
3	a)	Analyze how automation reduces deployment failures.	L4	CO1	5 M
	b)	Explain Kanban board workflow with an example.	L2	CO1	5 M
UNIT-II					
4	a)	Explain the need for source code control in software development and mention the advantages of GIT version control system.	L2	CO2	5 M
	b)	Explain collaboration using Git.	L2	CO2	5 M
OR					
5	a)	Compare JUnit and NUnit in terms of features and usability.	L4	CO2	5 M
	b)	Explain the importance of code quality in software development.	L2	CO2	5 M
UNIT-III					
6	a)	Describe the architecture of Jenkins with a neat diagram.	L2	CO3	5 M
	b)	Explain how Jenkins integrates with version control systems.	L2	CO3	5 M

OR					
7	a)	Create a Freestyle Project to build a sample Java application and explain the configuration steps.	L3	CO3	5 M
	b)	Interpret the importance of scheduling builds.	L2	CO3	5 M
UNIT-IV					
8	a)	Develop a Dockerfile for deploying a simple Java application and explain the significance and purpose of using a Dockerfile in containerization	L3	CO4	5 M
	b)	Explain how images are built in Docker.	L2	CO4	5 M
OR					
9	a)	Describe the components of Selenium suite.	L2	CO4	5 M
	b)	Differentiate between manual and automated testing.	L4	CO4	5 M
UNIT-V					
10	a)	Describe the workflow of Ansible.	L2	CO4	5 M
	b)	Interpret how Ansible Vault secures sensitive data.	L3	CO4	5 M
OR					
11	a)	Compare Ansible, Puppet, and Chef architectures.	L4	CO4	5 M
	b)	Explain the deployment process in OpenShift.	L2	CO4	5 M