

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY
2025*****Sixth Semester******Artificial Intelligence and Data Science*****CCS342 – DevOps*****(Common to Information Technology, Computer science and Engineering)******Regulations - 2021******Duration : 3 Hrs******Maximum: 100 Marks******PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)***

Q.No	Questions	BLT	CO	Marks
1.	Define Devops and identify its goals.	L2	1	2
2.	Compare Agile model and Devops model.	L2	1	2
3.	Define Maven. Write the features of Maven.	L2	2	2
4.	List the types of build profile.	L1	2	2
5.	Write about Jenkins. Why Jenkins is so popular in DevOps?	L2	3	2
6.	State the differences between Continuous Integration, Continuous Delivery, and Continuous Deployment.	L2	3	2
7.	What are ansible? Enlist advantages of it?	L1	4	2
8.	What is the purpose of adhoc commands in Ansible.	L1	4	2
9.	Recall the term Github Repository?	L1	5	2
10.	Write short notes on Azure Repos.	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a i Examine the stages involved in the Devops lifecycle stages.	L4	1	8
	ii Compare Amazon Web Service, Azure and GCP.	L4	1	8
Or				
	b i Inspect the Github's push and pull commands with examples.	L4	1	8
	ii Classify about any four key Services offered by of AWS.	L4	1	8
12.	a i What problems a developer can face if he /she does not use the project management tool like maven?	L2	2	8
	ii Explain the terms groupid, artifactid, version, and packaging in context of Maven.	L2	2	8
Or				
	b i Provide detailed explanation and example of Maven Plug-in including its purpose and usages within a project.	L2	2	10

	ii	Write Short notes on Gradle and its features.	L2	2	6	
13.	a	i	Summarize Jenkins Architecture with neat diagram.	L4	3	8
		ii	Explain the meaning of the term “Jenkins Build”, also explain the activities that occur during the Build process of Jenkins job.	L4	3	8
		Or				
	b	Examine the various types of job for setting up an Jenkins environment.	L4	3	16	
14.	a	Identify the term ansible module. Explain any five commonly used ansible modules.	L3	4	16	
		Or				
	b	i	Build an ansible playbook to create an empty file on remote hosts.	L3	4	8
		ii	Build an ansible playbook to install some packages on remote hosts.	L3	4	8
15.	a	Explain how you would set up a Git repository locally and link it to a GitHub repository. Additionally, analyze how version control impacts team collaboration and suggest strategies to manage conflicts in a multi-developer environment.	L4	5	16	
		Or				
	b	Explain how would you design an efficient pipeline to ensure faster deployments and minimal downtime? Analyze.	L4	5	16	