

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026***Sixth Semester**Computer Science and Engineering***CCS342- Devops****(Common to Information Technology & Artificial Intelligence and Data Science)***Regulations - 2021**Duration : 3 Hrs**Maximum : 100 Marks****PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)***

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	Compare AWS and Azure in terms of deployment.	L2	1	2
2.	List any two advantages of using Git.	L1	1	2
3.	Name two build phases in Maven.	L1	2	2
4.	What is meant by dependency management?	L1	2	2
5.	Name the function of HTML Publisher plugin.	L1	3	2
6.	What is a Jenkins job?	L1	3	2
7.	What are Ansible roles?	L1	4	2
8.	How YAML used in configuration management.	L1	4	2
9.	List two benefits of CI/CD in Azure.	L1	5	2
10.	What is meant by an Azure Organization?	L1	5	2

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

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Demonstrate a DevOps pipeline that integrates Azure with GitHub for continuous delivery.	L2	1	16
	Or			
	b Explain the role of DevOps in reducing the development-to-deployment cycle time.	L2	1	16
12.	a A developer faces repeated errors with missing JAR files. Explain how Maven's dependency management solves this.	L2	2	16
	Or			
	b You are tasked with speeding up build processes. Suggest improvements using Gradle parallel execution and explain how it helps.	L2	2	16
13.	a Explain the Jenkins Architecture with a neat diagram and explain the role of Master and Slave nodes.	L2	3	16
	Or			
	b Explain how to create a Jenkins pipeline job that compiles code, runs unit tests, and deploys to Tomcat.	L2	3	16

14.	a	A team manages 100 servers manually. Propose how Ansible can automate patch management.	L3	4	16
		Or			
	b	Compare Ansible with other configuration management tools (Chef, Puppet, SaltStack).	L3	4	16
15.	a	A team faces difficulty managing releases. Propose how Azure Pipelines can implement release management with approvals.	L3	5	16
		Or			
	b	A developer wants to automate testing after every commit. Show how to configure Azure pipeline triggers.	L3	5	16