



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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End - Term Examinations – MAY 2025

Date: 29-05-2025

Time: 09:30 am – 12:30 pm

School: SOCSE	Program: B. Tech-CDV	
Course Code : CSE3052	Course Name: System Provisioning and Configuration Management	
Semester: VI	Max Marks:100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	C05
Marks	24	24	26	26	00

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.

10Q x 2M=20M

1.	List the key concepts in Infrastructure management.	2 Marks	L1	C01
2.	What is the difference between Self provisioning and Automated provisioning.	2 Marks	L1	C01
3.	Which are some highlights of IaaS.	2 Marks	L1	C02
4.	List 4 drawbacks of cloud computing	2 Marks	L1	C02
5.	Tell Why is Configuration Management Important?	2 Marks	L1	C03
6.	Tell How Cloud Automation Improves the Modern Enterprise?	2 Marks	L1	C03
7.	Name the four pillars of Configuration management?	2 Marks	L1	C03
8.	Tell What Terraform is?	2 Marks	L1	C04
9.	List What the key features of Terraform are?	2 Marks	L1	C04
10.	Relate What the Key Concepts of Terraform Applications are?	2 Marks	L1	C04

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Outline the various methods of testing in cloud computing. Explain their significance and purpose. Show how each method is implemented and its importance in ensuring the reliability and performance of cloud-based applications.	10 Marks	L2	CO 1
Or					
12.	a.	Show provisioning and the different types of provisioning, providing detailed examples for each type. Relate scenarios in which each type would be applied. Summarize the advantages and potential challenges associated with each.	10 Marks	L2	CO 1
13.	a.	Describe the deployment options available on AWS including their key features and benefits, furthermore, detail their respective use cases and practical examples.	10 Marks	L2	CO 1
Or					
14.	a.	Demonstrate the application and benefits of various types of Infrastructure as Code (IaC) testing using supporting examples, and considering the end-to-end testing process of the same for a good comparison.	10 Marks	L2	CO 1
15.	a.	Explain the essential characteristics of cloud computing, detail the layers of cloud stack, and describe with supporting examples the different cloud deployment models and their fit for different business use cases.	10 Marks	L2	CO 2
Or					
16.	a.	Summarize the concept of virtualization, its importance in cloud computing, explain its role in efficient datacenter management, and then demonstrate with examples its advantages in scalability, resource use, and cost efficiency.	10 Marks	L2	CO 2
17.	a.	Explain the concept of Amazon EC2, and discuss its key features and benefits, including examples illustrating how EC2 can improve a startup's cloud infrastructure, as well as improving operational efficiency.	10 Marks	L2	CO 2
Or					
18.	a.	Demonstrate the steps involved in developing a cloud environment for the healthcare provider's patient management system. Explain how to ensure data security and compliance with healthcare regulations. Provide examples and best practices for configuring virtual machines, network infrastructure, and deploying applications in the cloud. Discuss	10 Marks	L2	CO 2

		potential challenges and solutions to address them during the development process.			
19.	a.	Summarize the levels of change tracking in configuration management and their contributions to system control.	10 Marks	L2	CO 3
Or					
20.	a.	Translate the technical aspects of configuration management into simpler terms with examples to explain its importance.	10 Marks	L2	CO 3
21.	a.	Summarize the features and functionality of Microsoft Azure Automation and Ansible, explaining their importance in cloud automation.	10 Marks	L2	CO 3
Or					
22.	a.	Demonstrate the role of AWS CloudFormation and Puppet in cloud automation by showcasing their practical usage through examples.	10 Marks	L2	CO 3
23.	a.	Explain Terraform in detail, covering its purpose, key features such as state management and modularity, basic commands, and its benefits for infrastructure management.	10 Marks	L2	CO 4
Or					
24.	a.	Summarize the working mechanism of Terraform, its significance, and the role of variables in simplifying infrastructure provisioning.	10 Marks	L2	CO 4
25.	a.	Outline the different types of loops available in Terraform and describe their roles in infrastructure automation.	10 Marks	L2	CO 4
Or					
26.	a.	Explain the key concepts of Terraform Automation, including its role in Infrastructure-as-Code (IaC) in detail.	10 Marks	L2	CO 4