


<b>Name:</b> <b>Enrolment No:</b>			
<p style="text-align: center;"><b>UPES</b>  <b>End Semester Examination, May 2025</b></p> <p> <b>Course: System Provisioning and Configuration Management</b>  <b>Program: B. Tech. CSE + DevOps</b>  <b>Course Code: CSDV 3012</b> </p> <p style="text-align: right;"> <b>Semester: VI</b>  <b>Time : 03 hrs.</b>  <b>Max. Marks: 100</b> </p> <p><b>Instructions:</b></p>			
<b>SECTION A (5Qx4M=20Marks)</b>			
S. No.		<b>Marks</b>	<b>CO</b>
Q 1	Explain System Provisioning and System Configuration with a suitable example.	4	CO1
Q 2	Enlist and classify the tools commonly used for Configuration Management.	4	CO3
Q 3	Explain the benefits of cloud computing by analyzing its advantages and impact on modern IT infrastructure.	4	CO1
Q 4	Examine the role of AWS (Amazon Web Services) in DevOps by evaluating its impact on continuous integration and delivery practices	4	CO2
Q 5	Describe the purpose and functionality of Playbooks and Ansible modules.	4	CO3
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	Describe the various phases of DevOps by categorizing and analyzing each stage role in the software development lifecycle.	10	CO1
Q 7	Explain the concept of "Infrastructure as Code" (IaC) by analyzing its meaning and significance within the context of DevOps methodology.	10	CO1
Q 8	Define Microservices and explain the working of Microservices with suitable example with respect to DevOps.	10	CO2

Q 9	<p>Explain the stages involved in the lifecycle of “Provisioning on the Cloud” by analyzing each phase significance in IT operations.</p> <p>OR</p> <p>Discuss the various types of deployment models used in IT operations.</p>	<b>10</b>	<b>CO3</b>
<p align="center"><b>SECTION-C (2Qx20M=40 Marks)</b></p>			
Q 10	Describe the step-by-step process of implementing Continuous Integration (CI) in software development projects, also analyze the benefits.	<b>20</b>	<b>CO2</b>
Q 11	<p>Define Monitoring and evaluate the impact of monitoring tools in IT operations.</p> <p>OR</p> <p>Discuss the ansible architecture that enables the automation and configuration management in IT environment,</p>	<b>20</b>	<b>CO3</b>