


Name: Enrolment No:			
UPES End Semester Examination, May 2024			
Course: Infrastructure Automation Program: BCA Course Code: CSBC3021P Instructions: Attempt all the questions. The total number of pages is 3. "Believe you can and you're halfway there."		Semester: VI Time : 03 hrs. Max. Marks: 100	
SECTION A (5 Q x 4M=20Marks)			
S. No.		Marks	CO
Q.1	Describe the HTTP methods supported by REST?	4	CO4
Q.2	A system administrator attempts to determine what is causing a computer to perform slower than normal. The administrator issues the ps command. What is displayed by this command?	4	CO1
Q.3	A user enters the commands as shown. What is the result after the mv command is entered? <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre>devasc@labvm:~/Documents\$ pwd /home/devasc/Documents devasc@labvm:~/Documents\$ mv myfile.sh ../Desktop/myfile2.sh</pre> </div>	4	CO1
Q.4	What are two features of the formal code review?	4	CO3
Q.5	The development team in the IT department has decided to implement CI/CD. What are three characteristics of this strategy?	4	CO3
SECTION B (4 Qx10M= 40 Marks) Answer any four.			
Q.6	Write the difference between centralized version control system (CVCS) and Distributed version control system (DVCS)? List the benefits of the Distributed version control system.	10	CO3
Q.7	Describe the benefits of various software design patterns? Compare the different software development methodologies.	10	CO3
Q.8	Discuss the caching mechanism and stateless in RESTful? List major HTTP response codes returned by REST API?	10	CO4

Q.9	<p>What is the outcome of performing a Git merge between two branches? Explain the git commands with examples: init, pull, push, fetch and log.</p>	10	CO3
Q.10	<p>Refer to the exhibit. Match the items needed in the Python script.</p> <p>Options: import xml, import json, resp.json(), serviceTicket, import ncclient, resp.status_code "username": "cisco", "Password": "cisco123!"</p> <pre style="border: 1px solid black; padding: 10px;"> import requests "Item A" api_url = "http://localhost:58000/api/v1/ticket" headers = { "content-type": "application/json" } Body = { "Item B" } resp = requests.post(api_url, json.dumps(body), headers=headers, verify=False) print("Ticket request status: ","Item C") response1 = "Item D" serviceTicket = response1["response"]["Item E"] print("The service ticket number is: ", serviceTicket) </pre>	10	CO3,4
<p>SECTION-C (2 Q x 20M=40 Marks) Answer any two.</p>			
Q.11	<p>Write a Python program to check whether the string is Symmetrical or Palindrome? Write its testing code to include all the possible tests? For example: Given a string. The task is to check if the string is symmetrical and palindrome or not. A string is said to be symmetrical if both the halves of the string are the same and a string is said to be a palindrome string if one half of the string is the reverse of the other half or if a string appears the same when read forward or backward.</p>	20	CO1,3

Q.12	Discuss the DevNet overview? How does DevNet encourage communities for network programmers? Discuss the DevNet online resources?	20	CO2
Q.13	What are the Linux File Permissions? Discuss the three permission groups in Linux? How to Change Permissions in Linux? Discuss the octal notations in Permissions in Linux? If a user wants to change "myfile.txt" file permission to " rw-r----- " what commands should be executed?	20	CO1