

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

June 2025 Semester End Main Examinations

Programme: B.E.

Branch: Institutional Elective

Course Code: 23CS6OERPA

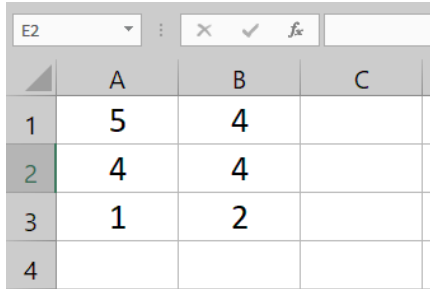
Course: Robot Process Automation Design and Development

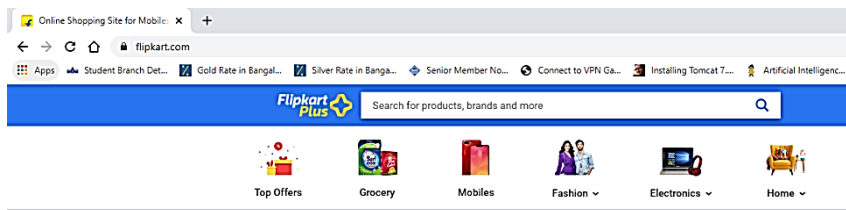
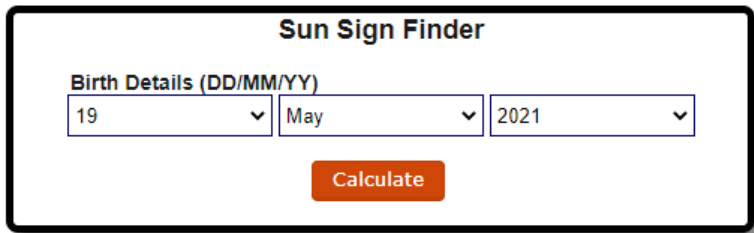
Semester: VI

Duration: 3 hrs.

Max Marks: 100

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I	CO	PO	Marks
	1	a)	RPA is being widely accepted across industries and across the world. Elaborate on the type of industries and how they can benefit from RPA.	CO1	PO1	10
		b)	Elucidate on the various components of the UiPath stack to make the UiPath platform fully operational at an enterprise level.	CO1	PO1	10
			OR			
	2	a)	Detail out on some of the important benefits of Robotic Process Automation (RPA).	CO1	PO1	8
		b)	Outline the ROI and efficiency gains companies can expect from adopting RPA. Justify how does it impact cost, speed, and accuracy in operations.	CO2	PO2	6
		c)	Discuss the characteristics which are needed in order to automate any process.	CO1	PO1	6
			UNIT - II			
	3	a)	Design a UiPath automation to read the excel file given below, compare the values in column1 and column2 and display the result (equal or not equal) in the third column. 	CO3	PO3	10
		b)	Highlight the importance of arguments in UiPath. Illustrate the working of arguments with an example workflow.	CO1	PO1	10
			OR			
	4	a)	Develop a software robot to collect the student details (USN, Name, Mobile number) with a delay of every 5 seconds and once	CO3	PO3	10

		the count reaches to 50, store all the collected details in a notepad file.																					
	b)	Design a software robot to perform the following operations: i) Scrape data related to different iPhone models and its price from a website https://www.flipkart.com/ ii) Store the details in the second sheet of the excel sheet. 	CO3	PO3	10																		
		UNIT - III																					
5	a)	With the help of workflow examples, differentiate the working of the following activities in UiPath: i) Find element vs Find relative element ii) Click trigger vs Key press trigger	CO2	PO2	10																		
	b)	Design a software robot to autofill the following details in the Weblink https://astrologyfutureeye.com/astro-calculators/sun-sign-calculator .  Dynamically enter the date of birth and click on Calculate. Once the result is generated (given below), display the Lord Planet in a message box. <table><tr><th colspan="2">Taurus Astrology</th></tr><tr><td>Zodiac Sign - Taurus</td><td>Zodiac Symbol - Bull</td></tr><tr><td>Lord Planet - Venus</td><td>Behavior - Gentle (Rajoguni)</td></tr><tr><td>Moon Sign Alphabet - E, U, Ae, O, V, Vi, Vu, Ve, Vo</td><td>Constellation - Kritika, Rohini, Mrigshira</td></tr><tr><td>Sun Sign Date - April 20 To May 20</td><td>Lucky Days - Friday, Saturday</td></tr><tr><td>Lord Deity - Lakshmi</td><td>Merits - Female, Trader (Vaisya)</td></tr><tr><td>Compatible Direction - South</td><td>Form & Element - Stable (Sthir) & Earth</td></tr><tr><td>Gemstone - Diamond in Ring Finger</td><td>Lucky Metal & Color - Gold & White</td></tr><tr><td>Compatible Signs - Libra, Capricorn, Aquarius</td><td>Lucky Number/Dates - 6, 15, 24</td></tr></table>	Taurus Astrology		Zodiac Sign - Taurus	Zodiac Symbol - Bull	Lord Planet - Venus	Behavior - Gentle (Rajoguni)	Moon Sign Alphabet - E, U, Ae, O, V, Vi, Vu, Ve, Vo	Constellation - Kritika, Rohini, Mrigshira	Sun Sign Date - April 20 To May 20	Lucky Days - Friday, Saturday	Lord Deity - Lakshmi	Merits - Female, Trader (Vaisya)	Compatible Direction - South	Form & Element - Stable (Sthir) & Earth	Gemstone - Diamond in Ring Finger	Lucky Metal & Color - Gold & White	Compatible Signs - Libra, Capricorn, Aquarius	Lucky Number/Dates - 6, 15, 24	CO3	PO3	10
Taurus Astrology																							
Zodiac Sign - Taurus	Zodiac Symbol - Bull																						
Lord Planet - Venus	Behavior - Gentle (Rajoguni)																						
Moon Sign Alphabet - E, U, Ae, O, V, Vi, Vu, Ve, Vo	Constellation - Kritika, Rohini, Mrigshira																						
Sun Sign Date - April 20 To May 20	Lucky Days - Friday, Saturday																						
Lord Deity - Lakshmi	Merits - Female, Trader (Vaisya)																						
Compatible Direction - South	Form & Element - Stable (Sthir) & Earth																						
Gemstone - Diamond in Ring Finger	Lucky Metal & Color - Gold & White																						
Compatible Signs - Libra, Capricorn, Aquarius	Lucky Number/Dates - 6, 15, 24																						
		OR																					
6	a)	With the help of workflow examples, outline the working of the following activities in UiPath: i) Anchor base ii) Type secure text iii) System trigger iv) Wait attribute	CO1	PO1	12																		
	b)	Differentiate between Full and Partial Selectors in UiPath. Provide examples for each.	CO2	PO2	8																		

			UNIT - IV			
7	a)	Demonstrate with an example each to handle the following exceptions: i) UI element is unavailable to read/write the data. ii) Index out of the range.	CO1	PO1	10	
	b)	Design a workflow in UiPath to monitor a send email event through Gmail. Clearly mention the steps.	CO3	PO3	10	
		OR				
8	a)	Detail out on the different actions performed on a workflow when the following debugging techniques are used: i) Slow Step ii) Step Over iii) Execution Trail iv) Step Into v) Step Out	CO2	PO2	10	
	b)	Design a workflow for the following scenario: The user wants his robot to open and start typing in the Notepad window when he presses Alt + W.	CO3	PO3	10	
		UNIT - V				
9	a)	Explicate some of the best practices considered while working on a project in UiPath.	CO1	PO1	10	
	b)	Imagine you've built a workflow in UiPath Studio. How would you deploy this workflow as a process in Orchestrator and ensure it runs on a specific robot? Detail out on the configuration steps.	CO1	PO1	10	
		OR				
10	a)	Reusing workflows in UiPath makes the automation process easier and better. Illustrate with examples, the two different methods for reusability of workflows.	CO1	PO1	10	
	b)	Explicate the complete process of publishing an automation project from UiPath Studio to Orchestrator.	CO1	PO1	10	
