

U.S.N.								
--------	--	--	--	--	--	--	--	--

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

Autonomous Institute Affiliated to VTU

May / June 2025 Semester End Main Examinations

Programme: B.E.

Semester: VIII

Branch: Institutional Elective

Duration: 3 hrs.

Course Code: 22IS8OERPA

Max Marks: 100

Course: Robotic Process Automation Design and Development

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

			UNIT - I		CO	PO	Marks															
1 a) List and explain the processes best suited for Robotic Process Automation.					<i>CO1</i>	<i>PO1</i>	5															
b) Explain the benefits of using RPA in detail.					<i>CO1</i>	<i>PO1</i>	10															
c) Illustrate the process flow for emptying the trash in Gmail.					<i>CO2</i>	<i>PO2</i>	5															
OR																						
2 a) List and explain the industries which can be benefited using automation					<i>CO1</i>	<i>PO1</i>	5															
b) Explicate the core components of RPA with neat diagram					<i>CO1</i>	<i>PO1</i>	10															
c) Explain the Ribbon and Variable panel in UiPath Studio.					<i>CO1</i>	<i>PO2</i>	5															
UNIT - II																						
3 a) Illustrate the process of building a data table manually and dynamically by using data scrapping (Workflow is required).					<i>CO2</i>	<i>PO3</i>	10															
b) For the given excel file table, fill the remaining entries by using the suitable excel application activities in UiPath.					<i>CO3</i>	<i>PO2</i>	5															
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <td>1</td> <td>Num1</td> <td>Num2</td> <td>Sum</td> <td>Diff</td> </tr> <tr> <td>2</td> <td>7</td> <td>3</td> <td></td> <td></td> </tr> </table>				A	B	C	D	1	Num1	Num2	Sum	Diff	2	7	3							
	A	B	C	D																		
1	Num1	Num2	Sum	Diff																		
2	7	3																				
c) Elaborate on the three different categories of variables.					<i>CO1</i>	<i>PO1</i>	5															
OR																						
4 a) Demonstrate the usage of variables and arguments in UiPath Studio for passing two arguments from one project and do the summation in another project and print the same.					<i>CO2</i>	<i>PO2</i>	10															

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.

	b)	Discuss the need for Switch activity. Develop a software robot simulate the Grade table using switch activity in UiPath (Read Input from user)	CO3	PO2	5												
		<table border="1"> <thead> <tr> <th>Grade</th><th>Message</th></tr> </thead> <tbody> <tr> <td>'A' or 'a'</td><td>"Excellent"</td></tr> <tr> <td>'B' or 'b'</td><td>"Good"</td></tr> <tr> <td>'C' or 'C'</td><td>"Okay"</td></tr> <tr> <td>'D' or 'd'</td><td>"Below average"</td></tr> <tr> <td>'F' or 'f'</td><td>"Fail"</td></tr> </tbody> </table>	Grade	Message	'A' or 'a'	"Excellent"	'B' or 'b'	"Good"	'C' or 'C'	"Okay"	'D' or 'd'	"Below average"	'F' or 'f'	"Fail"			
Grade	Message																
'A' or 'a'	"Excellent"																
'B' or 'b'	"Good"																
'C' or 'C'	"Okay"																
'D' or 'd'	"Below average"																
'F' or 'f'	"Fail"																
	c)	Given an array of integers, construct a workflow in UiPath and explain the steps to find the summation of the integers using looping construct.	CO2	PO2	5												
UNIT - III																	
5	a)	With the help of workflow examples, outline the working of Get Ancestor, Anchor Base, Wait Attribute and Indicate on Screen activities in UiPath.	CO2	PO2	10												
	b)	Identify any two Keyboard activities with suitable scenarios	CO1	PO1	5												
	c)	Illustrate the credential management activities in UiPath.	CO1	PO1	5												
OR																	
6	a)	Illustrate the mouse activities in detail by taking suitable example.	CO1	PO1	10												
	b)	Outline the any three typical failure points in UiPath implementation and how to tackle them.	CO1	PO2	5												
	c)	List and explain the difference between Full Text and Native screen scraping methods	CO1	PO2	5												
UNIT - IV																	
7	a)	Illustrate the steps in UiPath involved in monitoring a copying event and blocking it.	CO3	PO3	10												
	b)	Illustrate various techniques available for debugging in UiPath	CO2	PO2	10												
OR																	
8	a)	How UiPath supports Exception Handling? Explicate	CO2	PO2	10												
	b)	Design an assistant bot to compose an email when mouse left button is clicked	CO3	PO3	10												
UNIT - V																	
9	a)	Summarize on how do we use orchestration server to control bots	CO2	PO2	10												
	b)	With a suitable example, explain how to make the automation process easier with reusability of workflows.	CO3	PO3	10												
OR																	
10	a)	Elaborate on the best practices considered while working on a UiPath project.	CO2	PO2	10												
	b)	Detail out on the role of Orchestrator/Orchestration Server in managing bots, queues, process and assets	CO3	PO2	10												
