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 **PRESIDENCY UNIVERSITY**

  **Bengaluru**

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| **End - Term Examinations – JANUARY 2025** |
| **Date:** 16 – 01- 2025 **Time:** 09:30 am – 12:30 pm |

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| **School:** SOCSE | **Program:** B. Tech (COM,CEI,CAI,ISE,ISR,ISB) |
| **Course Code :**CSE3209 | **Course Name** : Automation Design and Development |
| **Semester**: V | **Max Marks**:100 | **Weightage**:50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **24** | **24** | **26** | **26** | **NA** |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Do not write anything on the question paper other than roll number.*

**Part A**

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| **Answer ALL the Questions. Each question carries 2marks. 10Q x 2M=20M** |
| **1** | Why has Robotic Process Automation (RPA) emerged as a popular technology in recent years? | **2 Marks** | **L1** | **CO1** |
| **2** | Briefly explain the evolution of RPA. | **2 Marks** | **L1** | **CO1** |
| **3** | What are User Events in RPA, and provide an example? | **2 Marks** | **L1** | **CO2** |
| **4** | Define the purpose of Scraping in RPA. | **2 Marks** | **L1** | **CO2** |
| **5** | List two tools used for automating virtual machine tasks. | **2 Marks** | **L1** | **CO3** |
| **6** | Name two libraries or tools used for image automation in Python. | **2 Marks** | **L1** | **CO3** |
| **7** | Define the purpose of computer vision in automation. | **2 Marks** | **L1** | **CO3** |
| **8** | List the steps required to connect a robot to a server. | **2 Marks** | **L1** | **CO4** |
| **9** | Name two benefits of deploying bots centrally through a server. | **2 Marks** | **L1** | **CO4** |
| **10** | Define a Meta Bot, and how does it differ from a standard bot. | **2 Marks** | **L1** | **CO4** |

**Part B**

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| **Answer the Questions Total 80 Marks.** |
| **11.** | **a.** | What are the basic components of an RPA platform? Explain the role of each component in automating processes.  | **10 Marks** | **L2** | **CO1** |
|  | **b.** | Discuss the different types of templates used in RPA development. How do these templates facilitate faster deployment? | **10 Marks** | **L2** | **CO1** |
| **Or** |
| **12.** | **a.** | Identify and explain the major application areas of RPA. How has RPA transformed these sectors? | **10 Marks** | **L2** | **CO1** |
|  | **b.** | Introduce some popular RPA tools in the market. How do they differ in terms of features and usability? | **10 Marks** | **L2** | **CO1** |
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| **13.** | **a.** | Explain data scraping in RPA and its significance in automation workflows. Differentiate between screen scraping and data scraping with examples. | **10 Marks** | **L2** | **CO2** |
|  | **b.** | Describe the steps to automate logging into a web-based email account using RPA. Include key components and activities used. | **10 Marks** | **L2** | **CO2** |
| **Or** |
| **14.** | **a.** | How can RPA be used to scrape data from a website and write it to a CSV file? Provide a detailed explanation of the process and components involved. | **10 Marks**  | **L2** | **CO2** |
|  | **b.** | What are User Events in RPA? Describe their purpose and give examples of scenarios where they are useful. | **10 Marks** | **L2** | **CO2** |

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| **15.** | **a.** | Describe the process of creating, managing, and decommissioning virtual machines using automation tools. Include the role of APIs, templates, and orchestration. | **10 Marks** | **L3** | **CO3** |
|  | **b.** | Provide a step-by-step guide for setting up and automating a Citrix application workflow using Native Citrix Automation tools. | **10 Marks** | **L3** | **CO3** |
| **Or** |
| **16.** | **a.** | Write a Program and procedure to make a file write and file read operations in UIPATH. | **10 Marks** | **L3** | **CO3** |
|  | **b.** | Write a Program and procedure in UIPATH to create simple Calculator. | **10 Marks** | **L3** | **CO3** |

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| **17.** | **a.** | Explain the end-to-end process of deploying a robot to a server, including packaging, uploading, and testing the robot. Why is centralized deployment critical for managing large-scale automation projects? | **10 Marks** | **L3** | **CO4** |
|  | **b.** | Define a Meta Bot, and how does the Meta Bot Designer simplify automation? Explain how AI Sense integrates with Meta Bots to enhance decision-making and adaptability in automation processes. | **10 Marks** | **L3** | **CO4** |
| **Or** |
| **18.** | **a.** | Outline a process to automate logging into a web-based email, recording actions, scraping email data, and writing it to a CSV file. | **10 Marks** | **L3** | **CO4** |
|  | **b.** | Explain the procedure for uploading packages to a server. Discuss the importance of version control, dependency management, and security checks during this process. | **10 Marks** | **L3** | **CO4** |

**\*\*\*\*\* BEST WISHES \*\*\*\*\***