

Group Name: \_\_\_\_\_

Total Grade: \_\_\_\_\_

Comments: \_\_\_\_\_

| Criteria                                       | Points | Description  | Points Earned |
|--|--------|--|---------------|
| <b>Clarity and Cohesion (25 pts)</b>           |        |  |               |
| Organization                                   | 10     | Clear structure and flow of the report, with sections logically arranged. Each question addressed in a clear manner or clearly marked within the report.   |               |
| Introduction                                   | 5      | Clear introduction that outlines the purpose and objectives of the assignment. Provides context for the chemical separator systems being analyzed and the role of the controllers introduced in this system. |               |
| Explanation of Results                         | 10     | Clear and concise explanation of simulation results. Demonstrates understanding of observed behaviors of controllers and relate its impact on the system.  |               |
| <b>Technical Correctness (50 pts)</b>          |        |  |               |
| Python Implementation                          | 10     | Correct implementation of simulation and plotting using Python. Code is well-commented and organized.  |               |
| ASPEN Dynamics Implementation                  | 10     | Correct implementation of simulation with the tasks activated as required. Correctness will be assessed based on results/plots discussed.  |               |
| Mathematical Analysis                          | 15     | Accurate derivation and representation of transfer functions for all cases. Correct application of control theory concepts.  |               |
| Assessment of Controller Performance           | 15     | Accurate calculation of key parameters of controllers to explain their performances in each of the tasks. Demonstrates understanding of how controller parameters affect system dynamics.                    |               |
| <b>Quality of Report Presentation (25 pts)</b> |        |  |               |
| Writing Style                                  | 10     | Clear and concise writing style, free from grammatical errors. Proper use of technical terminology and language.   |               |
| Figures and Tables                             | 10     | Figures are well-integrated into the report and effectively support the analysis. Tables are appropriately formatted and labeled.  |               |

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|                       |     |  |  |
|-----------------------|-----|--|--|
| Formatting and Layout | 5   | Consistent formatting throughout the report (font, size, spacing, etc.). Adequate use of headings, subheadings, bullet points for clarity. |  |
| <b>Total</b>          | 100 |  |  |

**CHE322 – Project Part 2 Grading Rubric**