

## PLC 210 Hands-On Assessments: Module 1

Student Name: \_\_\_\_\_ N# \_\_\_\_\_ Date: \_\_\_\_\_

This hands-on assessment requires that each student successfully demonstrates each of these tasks to the instructor's satisfaction. There is no grade for this assessment.

Prior to taking this assessment, the student must pass (minimum of 80%) the Knowledge and Application Assessment.

The student cannot proceed to the HOA for the next module without completing this HOA

Note: Be specific in answering questions on the status of outputs.

Saying only that an input condition is True / False is not a sufficient answer.

Explain why the input condition is True / False

Download the project file HOA\_Module\_1.ACD to the CompactLogix demo.

Ensure all demo inputs are OFF / False.

Place processor in RUN mode

### Check # Skills Task

\_\_\_\_\_ 1. Why is PL0 OFF? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Is the LES instruction on Rung 2 True or False? \_\_\_\_\_

\_\_\_\_\_ 2. Why is PL1 OFF? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Is the GRT instruction on Rung 3 True or False? \_\_\_\_\_

\_\_\_\_\_ 3. Why is PL2 OFF? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Is the GEQ instruction on Rung 4 True or False? \_\_\_\_\_

Is the LEQ instruction on Rung 4 True or False? \_\_\_\_\_

\_\_\_\_\_ 4. Why is PL3 ON? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 5. Why is PL4 OFF? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 6. Why is PL5 ON? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 7. Why is PL6 ON? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ 8. Change the Style of the MEQ instruction tags to Binary

\_\_\_\_\_ 9. Modify the Mask value to a number less than 10 that will make the  
Instruction False.  
What is the decimal number? \_\_\_\_\_

- \_\_\_\_\_ 10. Modify the Mask value to a number greater than 10 that will make the Instruction True.  
What is the decimal number? \_\_\_\_\_
- \_\_\_\_\_ 11. Why is LIM\_Tag1 False / OFF? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_ 12. Why is LIM\_Tag2 True / ON? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_ 13. Why is PL7 OFF? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Turn SS4 on – to the right**

- \_\_\_\_\_ 14. How long is one cycle? \_\_\_\_\_  
The time it takes Timer\_1 to go from 0 to recycle back to 0.
- \_\_\_\_\_ 15. How long is PL0 ON during a timing cycle? \_\_\_\_\_  
How long is PL0 OFF during a timing cycle? \_\_\_\_\_  
What causes PL0 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

What causes PL0 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 16. How long is PL1 ON during a timing cycle? \_\_\_\_\_

How long is PL1 OFF during a timing cycle? \_\_\_\_\_

What causes PL1 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

What causes PL1 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 17. How long is PL2 ON during a timing cycle? \_\_\_\_\_

How long is PL2 OFF during a timing cycle? \_\_\_\_\_

What causes PL2 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

What causes PL2 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ 18. How long is PL3 ON during a timing cycle? \_\_\_\_\_

How long is PL3 OFF during a timing cycle? \_\_\_\_\_

What causes PL3 to turn ON when SS4 is turned ON? \_\_\_\_\_  
\_\_\_\_\_

What causes PL3 to turn ON when SS4 is turned ON? \_\_\_\_\_

\_\_\_\_\_ 19. How long is PL4 ON during a timing cycle? \_\_\_\_\_

How long is PL4 OFF during a timing cycle? \_\_\_\_\_

What causes PL4 to turn ON when SS4 is turned ON? \_\_\_\_\_

What causes PL4 to turn ON when SS4 is turned ON? \_\_\_\_\_

\_\_\_\_\_ 20. How long is PL5 ON during a timing cycle? \_\_\_\_\_

How long is PL5 OFF during a timing cycle? \_\_\_\_\_

What causes PL5 to turn ON when SS4 is turned ON? \_\_\_\_\_

What causes PL5 to turn ON when SS4 is turned ON? \_\_\_\_\_

\_\_\_\_\_ 21. How long is LIM\_Tag1 ON during a timing cycle? \_\_\_\_\_

How long is LIM\_Tag1 OFF during a timing cycle? \_\_\_\_\_

What causes LIM\_Tag1 to turn ON when SS4 is turned ON? \_\_\_\_\_

What causes LIM\_Tag1 to turn ON when SS4 is turned ON? \_\_\_\_\_

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\_\_\_\_\_ 22. How long is LIM\_Tag2 ON during a timing cycle? \_\_\_\_\_

How long is LIM\_Tag2 OFF during a timing cycle? \_\_\_\_\_

What causes LIM\_Tag2 to turn ON when SS4 is turned ON? \_\_\_\_\_

What causes LIM\_Tag2 to turn ON when SS4 is turned ON? \_\_\_\_\_

\_\_\_\_\_ 23. How long is PL7 ON during a timing cycle? \_\_\_\_\_

How long is PL7 OFF during a timing cycle? \_\_\_\_\_

What causes PL7 to turn ON when SS4 is turned ON? \_\_\_\_\_

What causes PL7 to turn ON when SS4 is turned ON? \_\_\_\_\_

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