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? ____________
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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