RP/ IPRC TUMBA

ACADEMIC YEAR: 2019-2020

Dept: RE

LEVEL 3/ SEMESTER 2

MODULE TITLE: AUTOMATION AND CONTROL SYSTEM

MODULE CODE: REN302

Monday 6th Jul, 2020

ASSIGNMENT 4/

1) What is the difference between Sensors and actuators? Give an example of four sensors and four actuators?   **/6marks**

2) Draw a simple hydraulic system that will advance and retract a cylinder controlled by a solenoid valve using a PLC output. A solenoid is an actuator component that operates by converting the electrical energy into some form of mechanical motion. using a PLC outputs. Sketches should include details from the PLC output card to the hydraulic cylinder**. /8marks**

3) Draw a ladder diagram of such PLC system stated above to advance the cylinder during of 10 seconds and retract it during of 5 seconds and then restart the process again. **/6marks**

NB. To be submitted not later than: **Jul 22, 2020** before 11:59 PM

- Submission must go through :   **RP-elearning platform**
- If you need further clarifications please reach me to my email or Whatsap through: **jniyitegeka@iprctumba.rp.ac.rw /+250788973044**

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