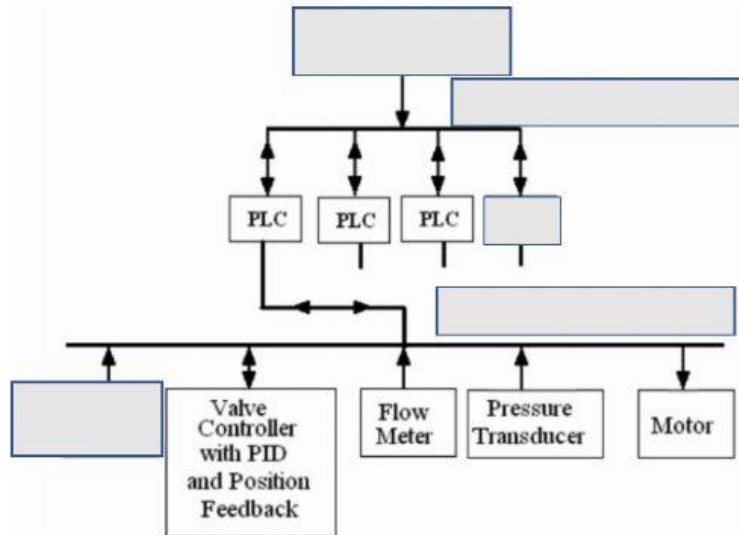


Grade	11 ADV	Subject	Term 3- Industrial Automation III ENI634
Name		ID	
Section	01	Date	W3-WS1

Answer all questions

Q1) Place the word in its correct blanks in the following industrial process network.

[Switch, LAN, Human Machin Interface, Fieldbus, PLC]



Q2) Fill the blank with the correct word from the list.

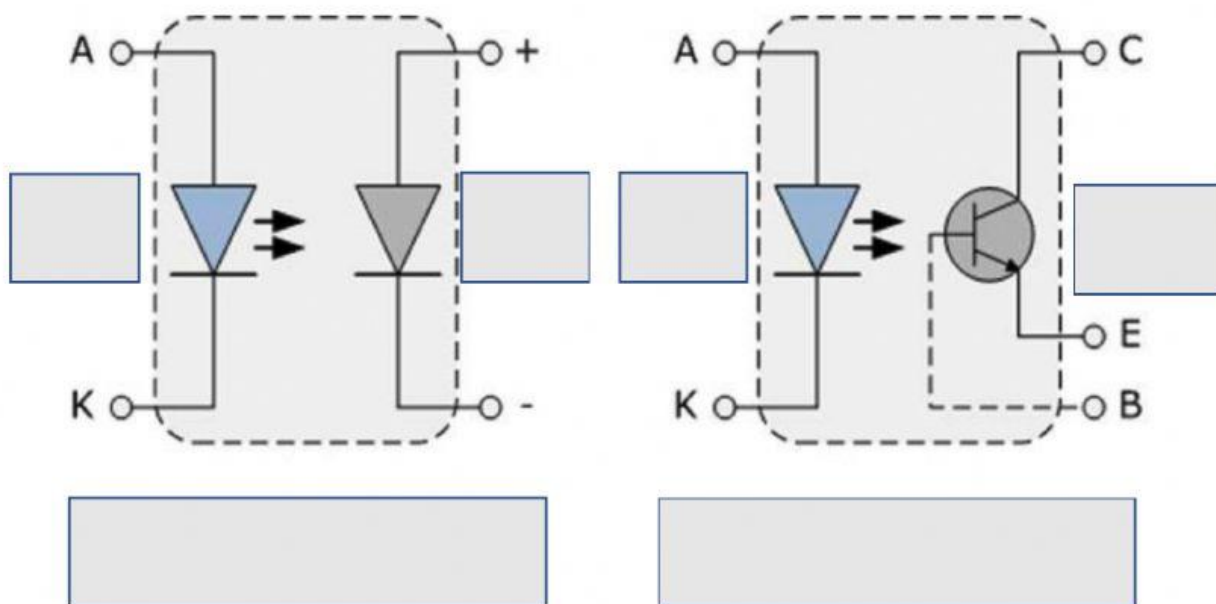
[actuator, digital signals, master to slave, Fieldbus, HMI, peer to peer, interface, sensor, PLC]

- Each is linked to a sub system and must process data from the and put out data to the Whilst smaller systems might have each component hard wired to the PLC, the modern way is to use so that a lot of individual channels may be connected through one path (Cable, wireless or optical fiber).
- The items connected to the Fieldbus must have a suitable electronic to enable to be added or removed from the Fieldbus.
- The at the top is the Master and the PLCs are the Slaves. Communication between them is or slave to master. Communication between the PLCs is

Q3) Fill in the short cut for each communication protocol or standard in the list below.

Shortcut	Name
	International Organisation for Standardisation
	Institute of Electrical and Electronic Engineers
	Manufacturing Automation Protocol
FIP	Factory Instrumentation Protocol
	Electronics Industry Association

Q4) Label the part of the following opto-isolators. Use drop down list.



Q5) Compare between Diode and transistor opto-couplers.

Item	Diode opto-isolator	Transistor opto-isolator
Terminals		
Response speed		
Current gain		
Output current		
Sensitivity		
Light sensors		