

**1. What mostly characterize safe control systems?**

- Redundancy
  - Backuping
  - Safer design
  - Office PC
  - SoftPLC
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**2. Complete the sentence!**

(Tyristor control systems  
Frequency Converters  
Softstarters  
Pneumatic controllers) are used for smooth starting and control of asynchronous motors.

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**3. Choose the correct option!**

For learning of a multilayer Neural Network, we use \_\_\_\_\_

- a) Back Propagation Algorithm
- b) High speed evaluation
- c) Cross learning algorithm
- d) Forward Propagation Algorithm

Expert systems are not used for \_\_\_\_\_

- a) Diagnostics
  - b) Prediction
  - c) Numerical computation
  - d) Interpretation
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**4. Explain the term**

Heat Flow Meter operation is based on – \_\_\_\_\_

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**5. Complete the sentence!**

DCS systems are typically characterized by ( distributed control construction  
wide use of intranet connections )  
strict hierarchical construction ) .

**6. Assign the terms from the left column to the corresponding ones on the right!**

Resistance temperature  
sensors

Resistance of semiconductor material  
decreases with growing temperature

Thermoelectric  
thermometers

Dependence of resistance on temperature

Semiconductor  
Polycrystalline Sensors

For measurement they use thermojunctions  
(thermoelectric tension and thermoelectric  
current generation)

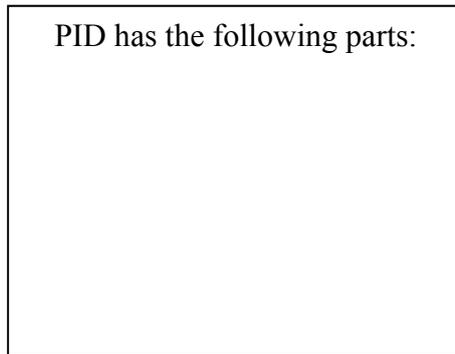
**7. Mark the correct statements:** Pneumatic Actuators are classified as

- Membrane type
- Electric type
- Semihydraulic type
- Piston type



**8. Place the correct elements into the block!**

PID has the following parts:



inductive      integral      predictional      proportional      derivative      directive

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