1. Choose the correct options: Sensors consist of

□ Sensor transmitter

□ HMI

□ Measuring circuit and amplifier

□ DCS

□ Signal processing circuits

□ Analogue to digital converter

□ Communication circuit

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

|  |  |  |
| --- | --- | --- |
| Hydrostatic pressure gauges |  | Bourdon-tube, membrane, corrugated  box-type |
|  |  |  |
| Force pressure gauges |  | Potentiometer, induction, optical  Capacity, tensometric  Resonating  Piezoelectric |
|  |  |  |
| Deformation pressure gauges |  | U-pipe  Container  Micromanometer with a inclinable arm  Compression vacuometers |
|  |  |  |
| Pressure sensors with electric output (electromechanical pressure gauges) |  | Bell, piston |

1. Complete the sentence!

are the most accurate sensors used for flow metering.

1. Choose the correct option: Programming according to IEC/EN 61131-3 can use the following types:

□ IRL (Independent Relay Language)

□ LD (Ladder Diagram)

□ PL (Pascal language)

□ ST (Structured Text language)

□ IL (Instruction List language)

□ FBD (Function Block Diagram language)

1. Fill the correct elements in the corresponding blocks!

Frequency Converters are used for

Softstarters are used for

smooth starting asynchronous motors smooth control of asynchronous motors

1. Complete the sentences!

Control is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

SCADA (Supervisory Control And Data Acquisition) enables \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

1. Explain the main types of systems

Hybrid systems – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Logical (binary) systems – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Choose the correct option!

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – is the main characteristic of synchronous motor

1. Equality of rotor speed with magnetic stator field
2. Mutual electromagnetic influence of rotating magnetic field of rotors and stators
3. Non-equality of rotor speed with magnetic stator field

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – are suited especially for high-force applications

1. Asynchronous Motors
2. Hydraulic actuators
3. Pneumatic actuators
4. Complete the sentence!

Ultrasonic Flow Meters use as the main principle for measurement.