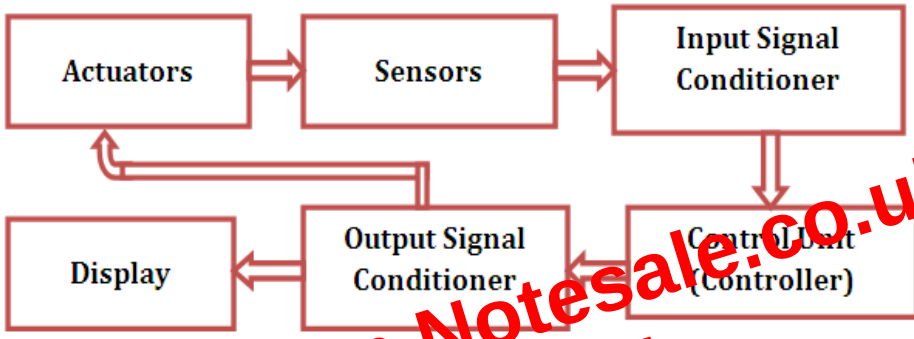
electronics, hydraulics and pneumatic and computer technologies together. This made Mechatronics emerge as a new discipline. What Mechatronics covers ranges from home technologies to advanced medical devices and from computer controlled benches to robots.

As mentioned above, mechatronics is an integration of electronics, computer science and mechanical engineering. The manufacturing industries totally depend on the integration of computer and electronics technologies for better products and processes. As the situation became very competitive it was necessary to segregate the electronics and mechanical branches. This division of the two branches led to an interdisciplinary approach to introduce mechatronics.

* Block diagram of Mechatronics Systems 3 Marks



* Block diagram description

>> Sensors :

A sensor consists of transducer whose function is to convert the one form of energy into electrical form of energy. A sensor is a sensing element of measurement system that converts the input quantity being measured into an output signal which is related to the quantity.

Example:

Temperature Sensor – Thermocouple

Input – Temperature

Output – E.M.F (Electrical Parameter).