

**Unit II : Transducers**

**Module Name : Inductive transducer Part 1**

**Module No : 10**

**Inductive Transducer:** An inductive transducer is a device that converts physical motion into a change in inductance.

**self inductance:** defined as the induction of a voltage in a current-carrying wire when the current in the wire itself is changing.

**mutual inductance:** When two coils are brought in proximity with each other the magnetic field in one of the coils tend to link with the other. This further leads to the generation of voltage in the second coil.

**Permeability:** Is the measure of magnetization that a material obtains in response to an applied magnetic field.

**Reluctance :** the property of a magnetic circuit of opposing the passage of magnetic flux lines.