

*MADHAV INSTITUE OF TECHNOLOGY AND SCIENCE, GWALIOR*

**SENSOR TECHNOLOGY**

ASSIGNMENT 5



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Submitted to:

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**Classify the mechanical sensors.**

*ANSWER)* Mechanical sensor detect form of mechanical deformation and translate the deformation into electrical signals.

Types of mechanical sensors:

1. Pressure sensors: It senses pressure.

 A pressure sensor usually acts as a transducer; it generates a signal as a function of the pressure imposed.

1. Force and torque sensor: It measures force and torque.

A **force torque** (FT) **sensor** is an electronic device that is designed to monitor, detect, record and regulate linear and rotational **forces** exerted upon it.

1. Barometer: A barometric pressure sensor is a sensor that detects atmospheric pressure.
2. Liquid flow sensor: Liquid flow sensors are used for gauging mass flow, flow velocity, or a volumetric flow rate of a liquid.
3. Gas flow rate sensor: A gas flow sensor (alternatively called a flow meter) is an instrument that measures the gas flow rate in a tube.
4. Accelerometer: An **accelerometer** measures the acceleration forces acting on an object, in order to determine the object's position in space and monitor the object's movement.
5. Altimeter: An **altimeter** or an **altitude** meter is an instrument used to measure the **altitude** of an object above a fixed level. The measurement of **altitude** is called altimetry.

The sensing techniques used:

1. Peizoresistivity
2. Piezoelectricity