

Physical World And Measurement

What is physics?

Physics is that branch of science in which we study about nature and natural phenomenon

Branch Of Physics

- 1- Mechanics
Motion of object at low speed
- 2- Thermodynamics
Theory of heat and temperature
- 3- Electromagnetism
Electricity and magnetism
- 4- Relativity
Motion of high speed moving particles
- 5- Quantum Mechanics
Some microscopic particles
- 6- Technology
Application of science for practical purpose

Errors in Measurement



♣ **Constant Errors**

It is due to faulty calibration of the scale in the measuring instrument.

♣ **Systematic Errors**

These are errors which occur due to a certain pattern or system.

♣ **Gross Errors**

- a. Improper setting of the instrument.
- b. Wrong recording of the observation.
- c. Not taking into account sources of error and precautions.
- d. Usage of wrong values in the calculation.

♣ **Random Errors**

It is very common that repeated measurement of a quantitative values which are slightly different from each other.