

3/11/2020  
TUESDAY

# PHYSICS

STD - XI  
class - 01

## Notes

### 1) What is Physics ?

Ans) It is a branch of science which deals with the basic laws of nature, different natural phenomena and ever-ending processes to find the ultimate truth of nature.

### 2) The scope and excitement of physics

The scope of physics :- It is vast and wide. The physics of microscopic phenomena are known as classical physics. The examples are Mechanics, Thermodynamics, Acoustics, Electricity and Magnetism, Optics, etc. The physics of microscopic phenomena are known as modern physics.

size of nucleus -  $10^{-14}$  m

mass of an electron -  $10^{-30}$  kg

size of universe -  $10^{26}$  m

mass of universe -  $10^{55}$  kg

time to cross nuclear distance by light -  $10^{-22}$  second

life time of sun -  $10^{18}$  year

Excitement of physics :- The study of physics helps to make useful devices. Eg :- Common balance, screw gauge, knife, etc. It also helps to explain natural phenomena like rainbow, reflection, refraction, mirage, etc.

### 3) Fundamental forces in nature

