St. Xavier's School, Purulia

Sub : Physics, Class : VII

Ch-1 (Physical Quantities and Measurement) Date - 24 . 4. 2020

1. A physical quantity is any physical property that can be quantified, that is, can be measured using numbers.

2. Examples of physical quantities are mass , area , volume , length, time, density, speed etc.

3. Standard units are the units used all over the world for measuring a particular quantity.

4. Standard units of: length is metre ,breadth is metre, height is metre, volume is cubic metre or m^3 , area is square metre or m^2, mass is kilogram or kg , density is kilogram per cubic metre or kg m^-3, time is second or s ,speed is metre per second etc.

5. Mass is a measure of the amount of matter in an object.

6. Speed is the distance travelled per unit of time.

7. Relationship between cm^3 and mL is 1cm^3 = 1mL .(cm^3 is the volume of solids) and (mL is the volume of liquids)

8i.Volume of a cube = side × side × side
ii.Volume of a cuboid = length × breadth × height
iii)area of a square = side × side
iv)area of a rectangle=length × breadth
v)Density = Mass ÷ Volume
vi)Speed = Distance ÷ Time

WORK TO BE DONE IN THE NOTEBOOK

1.Define the following terms: i. volume ii.area iii. density iv. speed v. mass

2.Write the relationship between the following units : i. hectare and m^2 ii. m^3 and cm^3

3.Which two factors are to be specified to measure density? (Answer given in pg.no.12)

4.Book pg.no.15 (Exercises-C,D ,F, H and I pg.no.16)

[For more information, you can watch the following videos]

https://youtu.be/nVrsgESZh-Y

https://youtu.be/EGqpLug-sDk