3. Measurement

1. How is length measured?

Metre

2. What is area?

The measure of a surface is known as area

3. How is area measured?

Area = Length * breadth
The unit of area will be metre*metre = (metre)$^2$

4. What are derived quantities?

Volume and density

5. What is derived quantity?

Quantities which have got the multiplication or division of fundamental physical quantities are called as derived quantities.

6. How is unit of length measured?
7. How is area of agricultural fields measured?

Measured in acre and hectare.

1 Acre = 4047 m² = 100 cent

1 hectare = 2.47 acre

8. What is square?

Its area is measured as length * length and the formula used is \( I^2 \)

9. What is rectangle?

Its area is length * breadth and the formula used is \( I \times b \)

10. What is triangle?
Its area is \( \frac{1}{2} \times \text{base} \times \text{height} \) formula used is \( \frac{1}{2} \times \text{bh} \)

11. What is circle?

It is area \( \pi = \frac{22}{7} \) or 3.14

12. What is volume?

It is the space occupied by a body is called its volume.

13. What is volume of regular objects?

Volume = base area \( \times \) height

14. What is the unit of volume of milli metre and centimeter?

- Unit of length milli metre (mm) unit of volume is cubic millimeter (mm³)
- Unit of length of centimeter (cm) unit of volume of cubic centimeter (cm³)

15. How is one cubic centimeter otherwise called as?

1 millilitre or ml

16. Which is used to measure and transfer a definite volume of liquid?

Pipette

17. What is the unit volume of the substance?
Density

18. What is oscillation?

It is one complete to and fro motion.

19. What is time period?

It is the time taken to complete one oscillation

20. What is length of the pendulum?

The distance between the point of the suspension and the centre of the bob is called as length of the pendulum.

21. What is amplitude?

It is the distance up to which the bob is pulled from the position of rest.