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Q. Define one kilogram, the S.I unit of mass. How it is related to (i) quintal (ii) metric tonne and (iii) gram?

Ans. One kilogram was defined as the mass of a cylinder of platinum-iridium alloy kept at the International Bureau of Weights and Measures at Sevres near Paris.

(i) Quintal: $1 \text{ quintal} = 100 \text{ kg}$

(ii) metric tonne: $1 \text{ metric tonne} = 10 \text{ quintal} = 1000 \text{ kg}$

(iii) Gram: $1 \text{ g} = \frac{1}{1000} \text{ kg} = 10^{-3} \text{ kg}$

Q Name and define the S.I unit of time. How it is related to (i) minute (ii) hour (iii) day and (iv) year.

Ans. The S.I unit of time is second (s).

$$1 \text{ min} = 60 \text{ s}$$

$$1 \text{ h} = 60 \text{ min} = 3600 \text{ s}$$

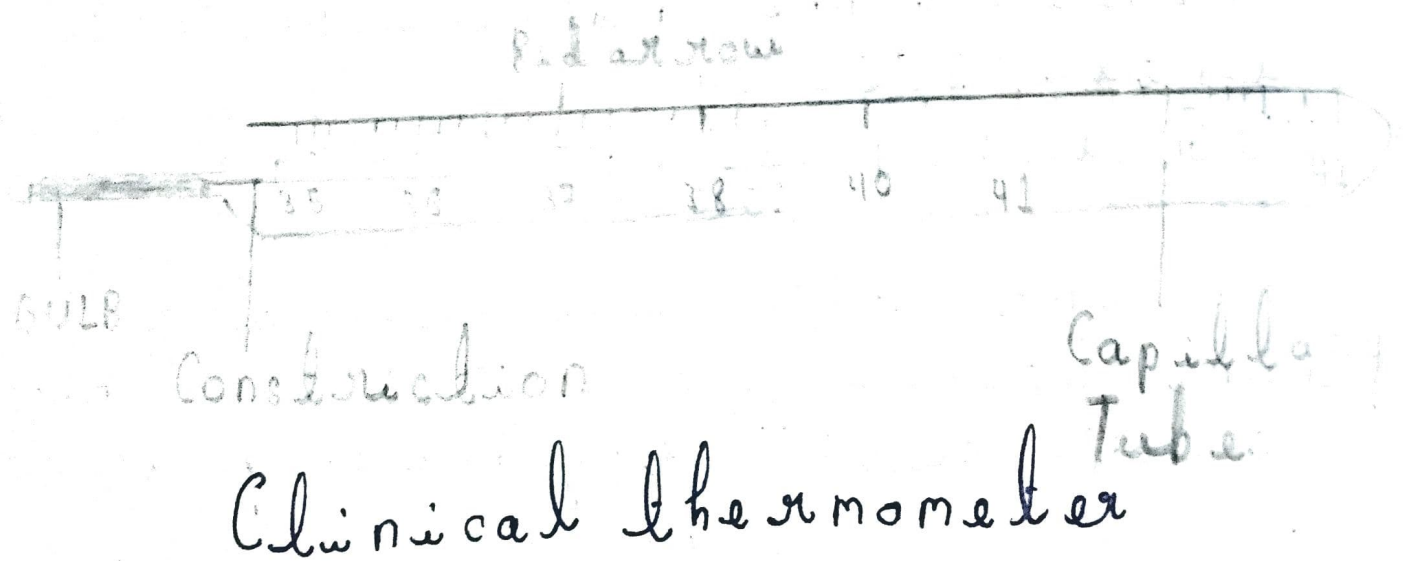
$$1 \text{ day} = 24 \text{ h} = 86400 \text{ s}$$

$$1 \text{ year} = 365 \text{ days} = 3.15 \times 10^7 \text{ s}$$

Q. Name the S.I. unit and one common unit of temperature ~~and~~ Write their symbol also.

Ans - The S.I. unit of temperature is kelvin (symbol k)

One common unit of temperature is Degree Fahrenheit (symbol $^{\circ}\text{F}$)



Q. Name the instrument used for measuring of the temperature of a person. Draw its labeled neat diagram.

Ans. The instrument used for measuring the temperature of a person is a clinical thermometer.

A clinical thermometer has markings from 35°C to 42°C . It has a slight bend or kink in the stem just above the bulb. This kink is called constriction. This constriction prevents the mercury from falling back all by itself. The temperature of a healthy person is 37°C . This temperature is marked by ~~red~~ a red arrow.

Clinical thermometers ~~marked~~ marked in $^{\circ}\text{F}$ are also available. They have markings from 95°F to 110°F . The red arrow indicating the temperature of a healthy person is at 98.6°F .