

28/6/21
HW

- Q 5 a. Define one metre, the S.I. unit of length state its one multiple and one submultiple.

Ans. One metre is defined as the distance travelled by light in air in $\frac{1}{299,792,458}$ of a second

multiple of metre = kilometre
Sub multiple of metre = centimetre

Q 6. a. $12 \text{ inch} = 1 \text{ foot}$

b. $1 \text{ ft} = \underline{30.48 \text{ cm}}$

c. $20 \text{ cm} = 0.2 \text{ m}$

d. $4.2 \text{ m} = \underline{420 \text{ cm}}$

e. $0.2 \text{ km} = \underline{200 \text{ m}}$

f. $0.2 \text{ cm} = 2 \text{ mm}$

g. $1 \text{ yard} = 0.91 \text{ m}$

Q > What do you mean by error of parallax.

Ans A ruler has some thickness so while looking at the reading on the scale, we get different readings when the eye is kept at different position. This is called the error of parallax.

Q > Explain stepwise how to take measurement of length of an object with a ~~measuring~~ meter scale.

Ans > To measure the length of an object with a metre scale, the ruler is placed with its markings close to the object.
> Then the zero mark on the scale is made to coincide with one end of the object.
> Now the position of the other end of the object is read on the ruler.

Q) Explain stepwise how to take measurement of length of an object with a measuring tap.

- Ans)
- > To measure the length of an object,
 - > First spread the tap along the length of the object.
 - > Then the zero mark on the measuring tap is made to coincide with one end of an object.
 - > Now the position of the other end of the object is read on the measuring tap.
 - > A measuring tap is a ~~flat~~ flexible ruler.