

hw

DT-28/5/2021

(B5) Define one metre, the SI unit of length state its one multiple and one sub multiple.

Ans - The SI unit of length is metre. In short it is written as m.

A metre was initially defined as the distance between two points on a rod of platinum alloy kept at

0°C in the International Bureau of weights and measures. It serves near Paris.

Deca multiples of metre

1 deca metre (dam) = 10 m

Submultiples of metre

1 m = 10 decimetre (dm)

b) Convert the following quantities as indicated:

a) $12 \text{ inch} = \underline{1} \text{ ft}$

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

c) $20 \text{ cm} = \underline{0.2} \text{ m}$

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

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

f) $0.2 \text{ cm} = \underline{2} \text{ mm}$

g) $1 \text{ yard} = \underline{0.91} \text{ m}$

Extra Q/Ans.

g) What do you mean by error of parallax?

Ans- The error caused in the apparent position of the object due to the viewing angle that is other than the angle that is perpendicular to the object.

Q) Explain stepwise how to ~~make~~^t measurement of length of an object with a meter scale

Ans- To take a measurement with a meter scale. Follow these steps.

* The scale should be placed properly at the edge and the 0 should be in one end.

* ~~The~~ While reading the position of the eye should be placed on the top of the scale

Q) Explain step wise how to take measurement of length of an object with a measuring ~~tape~~ tape.

Ans. To take measurement of length of an object with a measuring tape follow these steps.

* Spread ~~it~~ to measure a curved ~~line~~ line \overline{AB} spread the tape along the edges.

* then read the measurement when line A starts and ends with line B.

* So, the measurement is $8.2 \text{ cm} - 5.0 \text{ cm}$
 $= 3.2 \text{ cm}$