

H.W.
28/6/21

Date

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B. Short/Long Answer Question

5. Define one meter, the S.I unit of length. State its one multiple and one sub multiple.

Ans. One meter is defined as the distance travelled by light in air in $\frac{1}{299792458}$ of a second

Multiple of meter = Kilometer

Submultiple of meter = centimeter

6. Convert the following quantities as indicated:

a) 12 inch = 1 ft

b) 1 ft = 30.48 cm

c) 20 cm = 0.2 m

d) 4.2 m = 420 cm

e) 0.2 Km = 200 m

f) 0.2 cm = 2 mm

g) 1 yard = 0.91 m

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Home Assignment

Q What do you mean by error of parallax?

Ans - ~~Error of parallax~~ To measure the length of an object with a meter ruler, the ruler is placed with its ~~making~~ marking close to the object. Then the zero mark on the ruler 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. This reading gives the length of the object. But 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 meter scale.

Ans - * The scale 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.

* 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 tape.

Ans - * The tape is placed with its markings close to the objects.

* Then the zero mark on the tape is made to coincide with one end of the object.

* The position of the other end of the object is read on the tape.