

Home Assignment ; Series 01

To be done: from 20/04/2020 to 26/04/2020

Questions

01. (a) i/ What is Measurement?

ii/ You are provided with several measurements; Identify the number part and unit part for each.

130cm, 60g, 7tonnes, 4N, 6A, 4s, 24min, 84°C

(b) Define the following terms and provide two examples for each

i/ Physical Quantities

ii/ Fundamental Quantities

iii/ Derived Quantities

iv/ Units.

(c) List seven (7) fundamental quantities with their respective SI-units.

(d) State three Basic fundamental Quantities and three Basic fundamental units.

02. (a) Distinguish between Error and Mistake

(b) Define the following type of errors and hence state how to minimize them

(i) Parallax Error

(ii) Zero Error

(iii) Instrumental Error

03. (a) i/ Define length

ii/ State the SI-unit of length.

(b) Convert the following lengths into SI-unit
16km, 2.34cm, 10mm, 480cm.

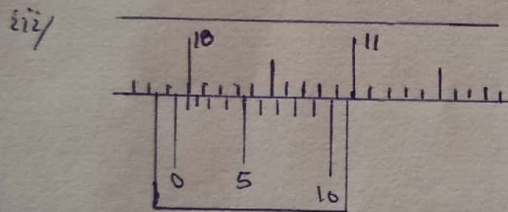
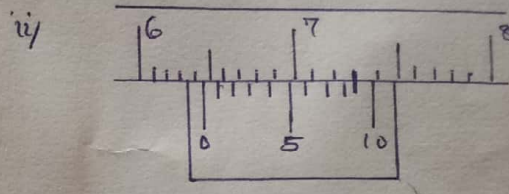
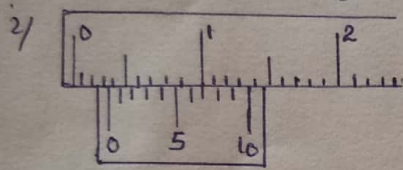
c) Give the accuracies of the following instruments used to measure length.

- (i) Micrometer screw Gauge
- (ii) Vernier Calliper
- (iii) Metre rule.

04. Draw a well labelled diagram of the vernier calliper and hence state the uses of the following parts:

- i/ External jaws (outside jaws)
- ii/ Inside jaws (Inner jaws)
- iii/ Depth probe.

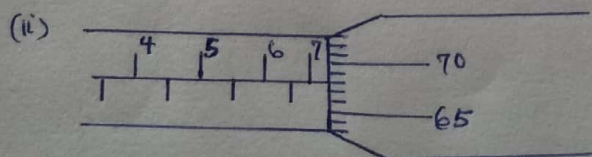
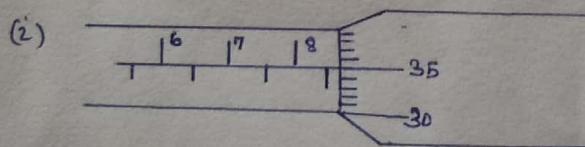
05. Give the readings of the following figures.



(b) Draw the part of the vernier callipers to indicate the following readings.

- i/ 3.95 cm
- (ii) 7.89 cm.

06. Below are parts of the micrometer screw gauge. Find their readings



07. (a) Define "Beam balance"

(b) Differentiate between mass and Weight.

08. (a) Define the term "time".

ii) State the SI-unit of time.

iii) Mention the device used in the laboratory to measure time.

(b) Convert all day of February, 2020 into minutes.

09. Draw the following warning signs, hence state their meaning and precautions when working with them.

(a) Toxic

Symbol:

Meaning: _____

Precaution: _____

(b) Irritant/Harmful

Symbol:

Meaning: _____

Precaution: _____

(c) Explosive

Symbol:

Meaning: _____

Precaution: _____