

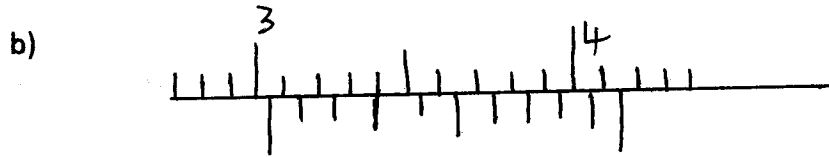
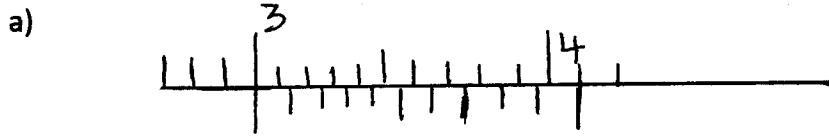
NAME: _____ CLASS _____ ADM NO. _____

GATTU SECONDARY SCHOOL, P.O. BOX 327 – 01030, GATUNDU.

FORM 2 PHYSICS MID TERM EXAMINATION. TERM 2 2015.

NAME: _____ CLASS _____ ADM _____

1. Give the readings shown in the diagrams below. (2mks)

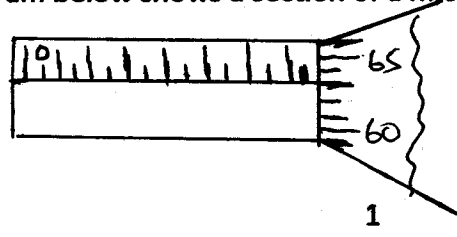


2. Draw vernier scale sections showing the following readings. (4mks)

a) 7.08 cm

b) 4.67 cm (4mks)

3. The diagram below shows a section of a micrometer screw gauge.



Write down the reading

(3mks)

4. Draw a section of a micrometer screw gauge with the reading shown below

a) 5.05mm (3mks)

b) 0.35 mm (3mks)

5a) Define pressure and give the SI Units. (3mks)

b) A rectangular aluminium solid block of density 2700kg/m^3 has dimensions of 40cm by 12cm by 6cm. The block rests on a horizontal flat surface. Calculate:

a) the minimum pressure (3mks)

b) the maximum pressure it can exert.

(3mks)

6. State ^{TWO} two advantages and ~~no~~ disadvantages of using mercury as a thermometric substance.

ADVANTAGES

(4MKS)

DISADVANTAGES

7. A pinhole image of a building is 12cm high and the box is 15cm long. If the building is 24cm high, find its distance from the pinhole.

(3mks)

8. A charge of 0.8 coulombs crosses a point in a circuit in 0.5 seconds. Calculate

i) The current in the circuit (2mks)

ii) The number of electrons crossing the point if charge of an electron = 1.6×10^{-19} coulombs. (2mks)

9. Two balloons inflated with air are tied with strings and held apart. Both the balloons are rubbed with fur. Why do the balloons move apart when they are brought close together? (2mks)

10. Write down three properties of magnetic field lines. (3mks)

11. Give the main difference between a bar magnet and a ceramic magnet. (2mks)

12. What property of light is suggested by the formation of shadows? (2mks)

13. Write down 5 characteristics of an image formed by a plane mirror. (5mks)

14. Magnification, M, produced by a pinhole camera can be expressed as a ratio as shown below.

$$M = \frac{\text{height of image}}{\text{Height of object}}$$

Write down a similar ratio to calculate the magnification produced by a pinhole camera. (3mks)

