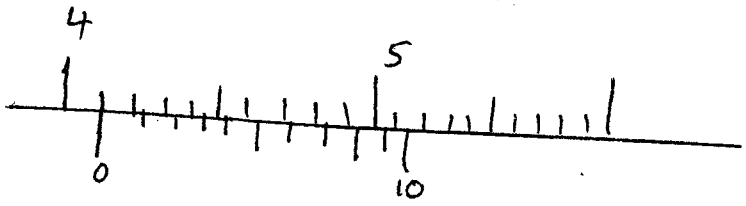
NAME_____ADM NO_____CLASS_____

MID-TERM PHYSIS TEST FORM TWO

TERM TWO

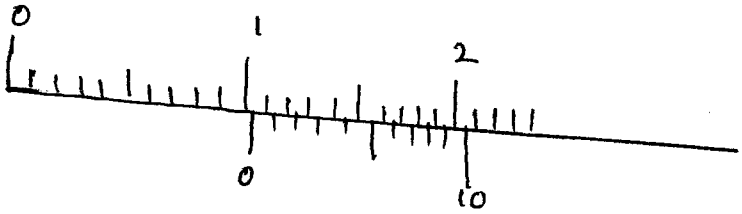
1. Give the reading shown in the sketch diagrams below.

a)



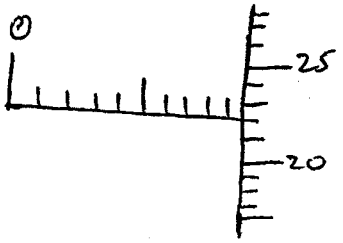
(2mks)

b)



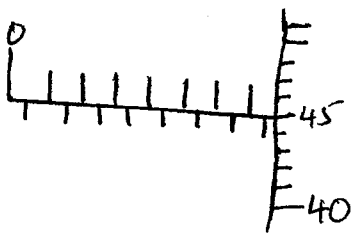
(2mks)

c)



(2mks)

d)



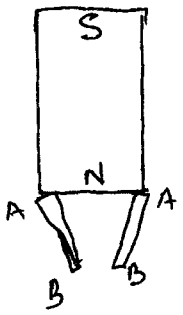
(2mks)

2. Write the following as instructed

a) 0.001962 in standard form correct to two significant figures (2mks)

b) 234 in standard form to 1 significant figures (2mks)

3. Below is a diagram showing two pins attached to magnet



a) Indicate the polarity of the pins (2mks)

b) Explain the behavior of the pins (2mks)

4. Using domain theory draw diagrams to show

i) An unmagnetized substance (2mks)

ii) Magnetized substance (2mks)

iii) Saturated substance (2mks)

5. a) why is soft iron unsuitable for making permanent magnets (2mks)

b) How does a ceramic magnet differ from a bar magnet (2mks)

6. In an experiment to determine the size of a molecule of olive oil, a drop of oil of volume 0.12cm3 was placed on a clean water surface. The oil spread into a patch of area 6.0 x 10mm^2. Estimate the thickness of the molecule (4mks)

7. a) define moment of a force (2mks)

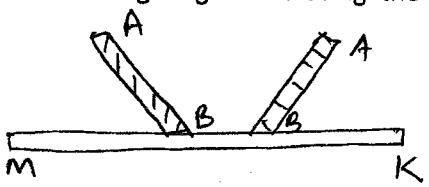
c) A meter rule is balanced by mass of 24g and 16g suspended from its ends. Find the position of the pivot (4mks)

8. Define the terms

i) Current (2mks)

ii) Coulomb (2mks)

9. a steel bar is being magnetized using the method shown



i) Name the method used (2mks)

ii) If ends B are both south poles give the polarity of M and K (2mks)

iii) What name do we give to such poles (2mks)

10. Express the following measurements in m^2

a) 26.9cm^2 leaving your answer in standard form (2mks)

b) 356mm² (2mks)

11. A sphere of diameter 6cm is ~~molded~~ moulded into a thin uniform wire of diameter 0.2mm. Calculate the length of the wire in meters (4mks)

12. Describe a simple experiment showing that surface tension tension of soaf is less than that of water

(3mks)

13 a) give two uses of ~~capillarity~~ capillary action (2mks)

b) ~~Capillarity~~ Capillary action is sometimes a nuisance. Explain (2mks)

14. The length of a spring is 16.0cm. Its becomes 20.0cm when supporting a load of 5.0N. Determine the length of the spring when the load is

i) 2.5N

ii) 6N

15. Write down

i) Three factors ~~determine~~ determing pressure in fluids (3mks)

ii) the properties of a liquid used in a hydraulic machine (3mks)