# FORM 2 PHYSICS ASSIGNMENT
MAY 2020

1. Water has a density of $1000 kgm^{-3}$, what does this mean?   (1 mk)
2. In finding the density of a liquid, why is the method of using a density bottle more accurate than the one of using a measuring cylinder?   (2 mks)

3. The mass of a density bottle is 20.0g when empty. 70.0g when full of water and 55.og when full of a second liquid. Calculate the density of the second liquid. (4 mks)

4. Explain why many houses in hot areas like Mombasa should be painted white while those in colder places like Timboroa should be painted with dull   colours. (3 mks)

(b) Why are ventilations for a room put near the roof and not near the flour?
   (2 mks)

5. A roof has a surface area of $20000 cm^{2}$. If the atmospheric pressure exerted on the roof is 100000 Pa determine the force on it (Take $g = 10 NKg^{-1}$)
   (3 mks)

6. Give five differences between mass and weight.

Mass	Weight
1.	
2.	
3.	
4.	
5.	

(5 mks)

7. $1800 cm^{3}$ of fresh water of density $1000 kgm^{-3}$ is mixed with $2200 cm^{3}$ of sea water of density $1025 kgm^{-3}$. Calculate the density of the mixture.   (4 mks)

8. Calculate the area of the trapezium below.   (3 mks)
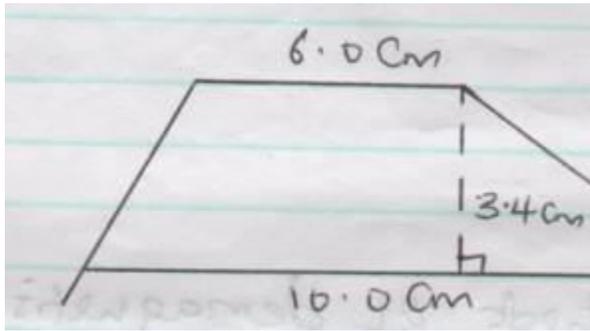
9. A sphere of diameter 6.0cm is mounded into a thin uniform wire of diameter 0.2mm. Calculate the length of the wire in metres. (Take $\Pi = \underline{22}$ (6 mks)
$$7)$$

10. In making a simple cell, the two electrodes used are not of the same kind. Explain.   (5 mks)

11. Use domain theory to explain the difference between magnetic and non-magnetic materials.   (5 mks)

12. Describe three methods of demagnetizing a permanent magnet.   (5 mks)

13. If an oil drop of diameter 0.5mm spreads on the surface of water to form an oil patch of diameter 0.2m, estimate the thickness of the oil molecule and express your answer to ,two significant figures.   (5 mks)