

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

FORM 1 PHYSICS. MID TERM EXAMINATION. TERM 2 2016.

NAME _____ ADM _____ CLASS: _____

1. Define the following terms

a) Mass (2mks)

b) Density (2mks)

2. Gold of mass 9.6g has a volume of 0.5cm^3 . Determine the density of gold in

a) g/cm^3 (3mks)

b) kg/m^3 (2mks)

3. 200cm^3 of fresh water of density 1000kg/m^3 is mixed with 100cm^3 of sea-water of density 1030kg/m^3 . Calculate the density of the mixture. (5mks)

4. Define time and give its SI units.

(2mk

5. Force is said to be a push or pull. State five effects of a force.

(5mks

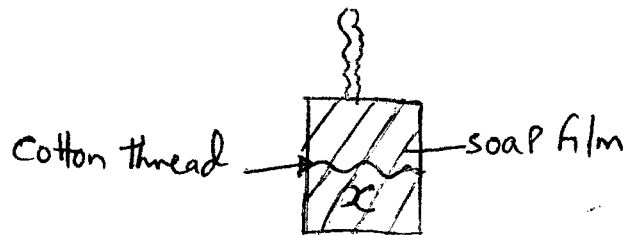
6. List down TEN TYPES of force you are acquainted with.

(10mks

7. Which are the two main factors that would affect surface tension.

(4mks

8. Below is a metal frame dipped in soap film



When part marked X is pricked draw the resulting diagram.

(2mks)

9. A dog whose mass is 12kg is taken to the moon where gravitational field strength is 1.7N/kg. Determine the dog's weight on

i) the moon

(4mks)

ii) the earth

10. Write down THREE PROPERTIES of a liquid used in a hydraulic machine.

1.

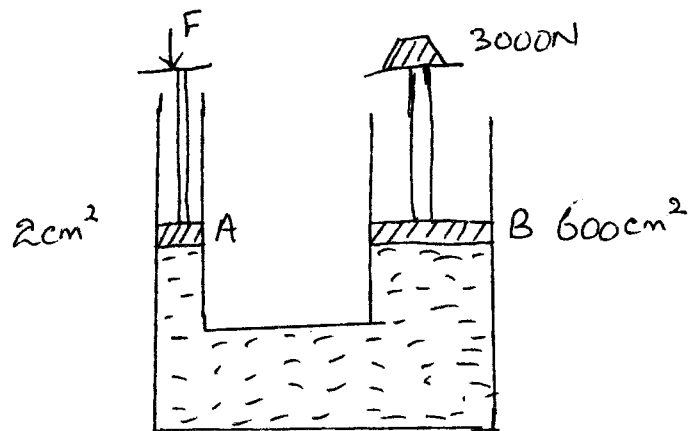
(6mks)

2.

3.

11. Determine the value of F in the figure below.

(4mks)



12. Write down three factors on which pressure in a liquid depend.

(3mks)

13. A brick measures 2 m by 1 m by $\frac{1}{2}\text{ m}$ and weighs 600 N . Find

i) Minimum pressure

(3mks)

ii) Maximum pressure

(3mks)

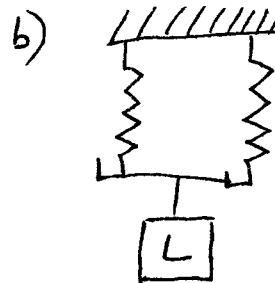
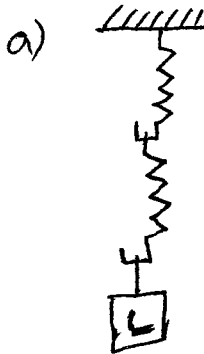
14. Draw a diagram showing how forces of 4N and 11N can be combined to produce a resultant force of

a) 7N

(4mks)

b) 15N

15. Two identical springs of negligible weight are arranged as shown below



A single spring extends by 1cm when a weight of 2N hangs on it. If L is a load of 6N calculate the extension in each case. (4mks)

16. An object weighing 15N appears to weigh 8N when immersed in a liquid. Calculate the upthrust on the object. (2mks)