

FORM ONE PHYSICS EXAM

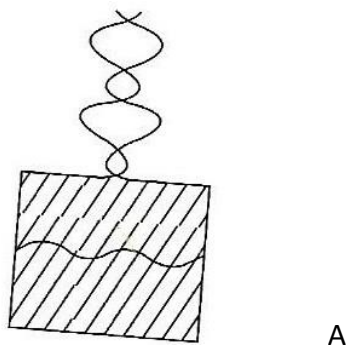
TIME: 2 HOURS

Attempt all the questions in the spaces provided.

1. Give two career opportunities in physics. (2 mks)

2. Give three basic laboratory rules. (3mks)

3. State with a reason what will happen to the diagram if side A is broken with a needle, and draw the final diagram (4mks)

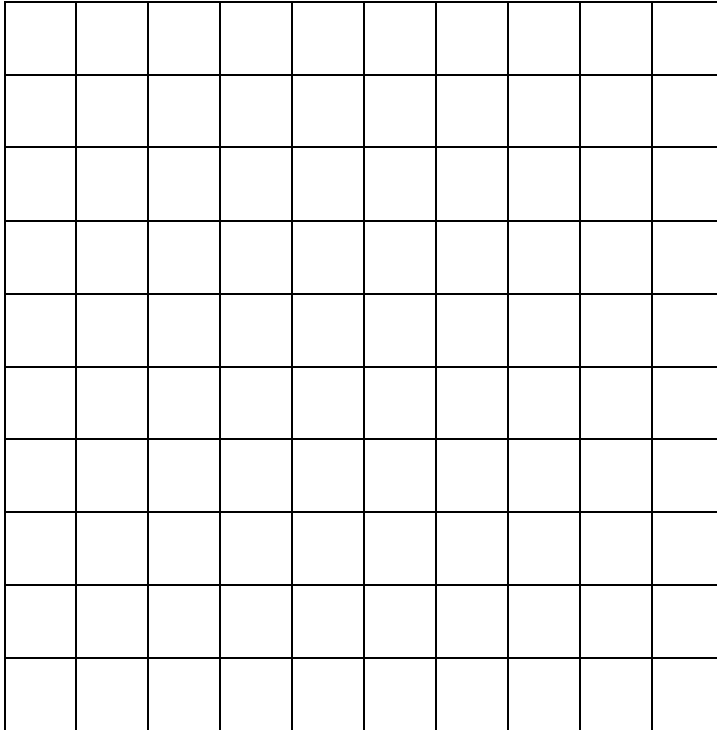


3. What is the first aid measure for the following accidents in the laboratory.

(i) Cuts. (3mks)

(ii) Burns. (3mks)

6. Estimate the area of the irregular surface shown in the figure below. (4mks)

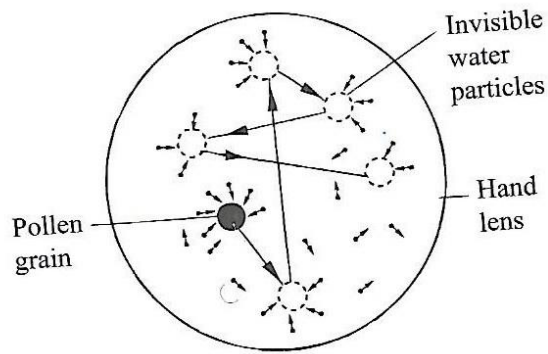


7. The density of a material is 22.5gcm^{-3} . Express this in SI units. (3mks)

8. Give 3 effects of a force.

(6mks)

9. It is observed that the pollen grains are in constant motion. Explain the observation. (4mks)



10. In a hydraulic press, a force of 200N is applied to master piston of area 25cm^2 . If the press is designed to produce a force of 5000N, determine;

(a) The area of the slave piston. (4mks)

(b) The radius of the slave piston. (4mks)

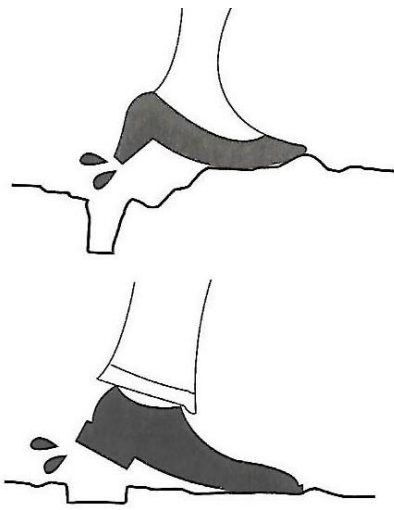
11. Explain why the walls and ceiling boards painted white. (3mks)

12. Explain the greenhouse effect and how it affects the earth. (4mks)

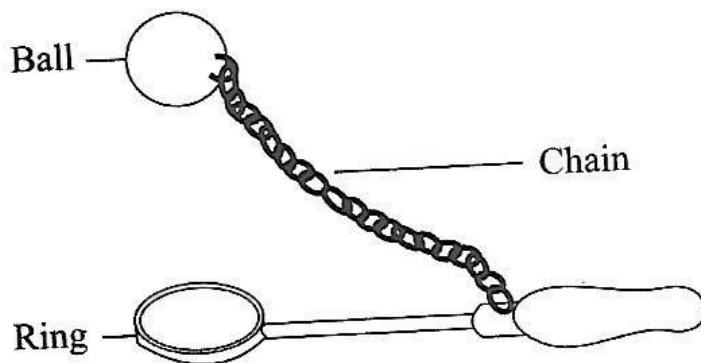
13.The ventilations for a room are put near the roof and not near the floor. Explain
n (4mks)

14.Explain how temperature affects Brownian motion. (4mks)

15.Pressure is affected by many factors,study the diagram below and give reasons for such
effects. (4mks)



16. The ball shown below is bigger than the ring, explain an experiment to enable the ball pass through the ring. (5mks)



17. A brick 20cm long, 10cm wide and 5cm thick has a mass of 500g. Determine the (Take $g=10\text{Nkg}^{-1}$)

(a) greatest pressure that can be exerted by the brick on a flat surface. (3mks)

(b) Least pressure that can be exerted by the brick on a flat surface. (2mks)