**PHYSICS FORM 1**

**TERM II-2024 MID- TERM EXAM**

**TIME: 1HR 30MIN**

**NAME……………………………………………… CLASS…………ADM ….……..**

**Answer all questions in the spaces provided**

1. Name two branches of Physics and how they are related to Mathematics. (4mks)
2. Convert each of the following from Kelvin to O C. (4mks)
3. 0 k
4. 167 k
5. State three properties of a liquid that is suitable for use in a thermometer. (3mks)
6. Study the diagram below and answer the questions that foll

(a) State which gas diffused faster (1mk)

1. Explain how the rate of diffusion depends on the density of a gas (2mks)
2. If the experiment was performed at a higher temperature, what would you expect? (2mks)
3. (a) What do you understand by the term Anomolous Expansion of water. (2mks)

(b) Give 3 effects of Anomolous Expansion of water. (3mks)

1. Explain two applications of Expansion and Contraction in Solids. (4mks)
2. Explain why the smell of rotten eggs broken at one end of the room soon spreads throughout the room. (2mks)
3. Name the difference between Solids, Liquids and Gases in terms of;
4. The arrangement of molecules. (2mks)
5. Distance separating the molecules. (2mks)
6. The movement of molecules. (2mks)
7. The figure below shows a liquid ice pail.



If the liquid has a density of 1.20 gcm3, determine the pressure exerted at the bottom of the container by the liquid. (3mks) (g=10N/kg density of water = 1gcm-3

1. Convert the following: (2mks)
2. 1000kg into grams
3. 0.00001m to mm
4. Explain how a syringe draws; (2mks)

 Injectable drug from a bottle

1. The figure below shows a U- tube filled with Water, Mercury and another liquid.
2. Determine the density of the liquid X. (3mks)

(Density of Mercury 13,600Kgm-3

g= 10N/Kg, density of water 1000kg-3

1. State the possible reason why mercury is used. (2mks)
2. Name three types of forces. (3mks)
3. The air pressure at the base of a mountain is 75.0 cm of mercury while at the top it is 60.0 cm of Mercury. Given that the average density of air is 1.25 Kgm-3 and the density of Mercury is

 13600 Kgm-3, calculate the height of the mountain. (3mks)