

NAME: STREAM:

535/1
PHYSICS
Paper 1
Aug, 2024
1 Hour



END OF TERM II EXAMINATIONS 2024

Uganda Certificate of Education

S.1 PHYSICS

Paper 1

1 Hour

INSTRUCTIONS:

- This paper consists of two sections **A** and **B**. Section A has two test items while section B has one compulsory test item.
- You are required to attempt **the item in section B only one item from section B**.
- Write your answers on the answer sheet(s) provided, beginning the solution of each item on a fresh page.
- Where calculations are involved, show all the necessary working.
- Attach the question paper on your answer sheet(s).

ITEM 1

One morning, a boy woke up and observed that the dust particles in the path of light rays through a small hole in the roof of his room moved randomly. Later in the afternoon, he saw that the dust particles moved even faster. He became curious and asked his elder brother but who failed to give him a convincing explanation. He moved round the house and was amused to see that some substances had fixed volumes and shapes, others had fixed volumes but not shapes while others had neither fixed shape nor volume. Later at night as they were watching the television, his brother told him that inside the television is a state of matter called plasma.

As a learner of Physics, help the boy understand:

- (a) why the dust particles moved randomly. **(03 scores)**
- (b) why some substances have fixed shape and volume while others have fixed shape but not volume while others have neither a fixed shape nor fixed volume. **(06 scores)**
- (c) what the plasma state of matter is. Your explanations may include some examples of plasma.

(03 scores)

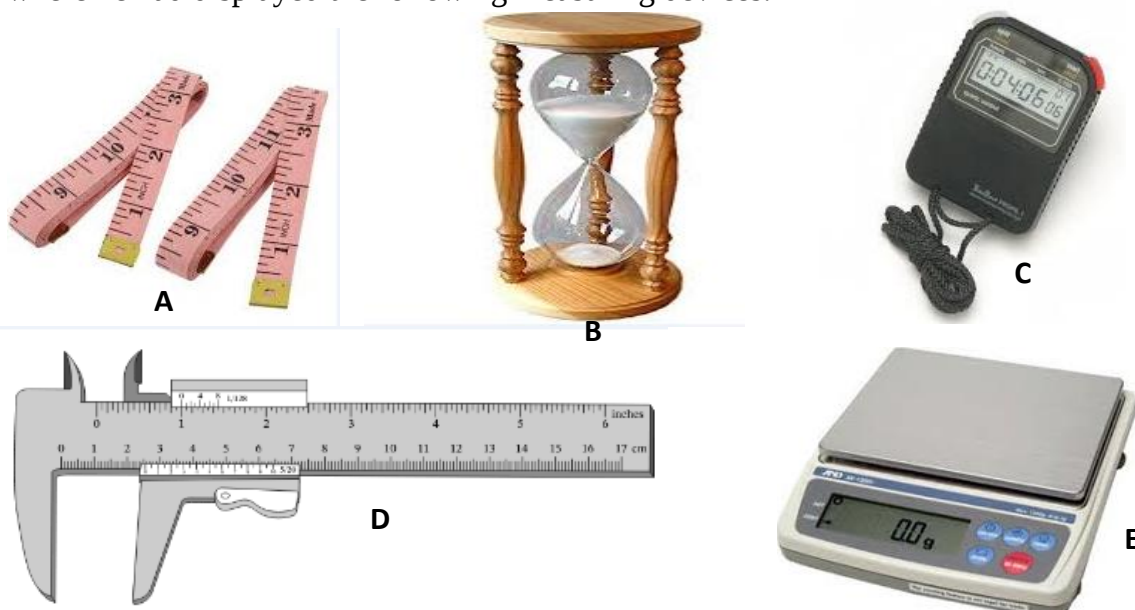
ITEM 2

During a Physics lesson in a certain school, a teacher told the learners that when heat is supplied to matter, matter progressively changes from one state to another. Before explaining further, the bell for ending the lesson rung. The teacher couldn't explain how matter changes from one state to another but instead instructed the learners to make research. One of the learners approaches you for consultation. As a learner of Physics, help the student know how matter changes from one state to another. Your explanation should include the names of the changes, an illustrative diagram and the application of the different changes in states of matter.

(12 scores)

ITEM 3

When introducing the lesson for measurement, the teacher took the learners to the laboratory where he had displayed the following measuring devices.





The teacher has flu and cannot speak well. He instead instructs you to take the rest of the class through the lesson as he observes from behind to moderate.

- (a) Prepare a write to show how you would help the rest of the learners to know each of the device displayed and the physical quantity it measures. Advise the learners on the precautions they would take to minimize errors when using devices A and F.
(16 scores)
- (b) One student wants to be a surveyor in future while the other wishes to be a tailor. Help the two learners to know the devices the are most likely to use when serving their customers in future.

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