



LUZINGA SECONDARY SCHOOL-KAMULI

MIDTERM ONE EXAM 2024

S.2 PHYSICS

Time: 2hours

INSTRUCTION

Answer all questions in both sections

SECTION A

1. Kapere was beaten by his mother serious and he decided to go and stand under sunshine so as his temperatures rise due to heat. He wanted to be taken to hospital and parents spend as assign of revenge. As a s.2 learner help the parents to understand the meaning of,
 - a) Temperature?(1mk)
.....
.....
 - b) Heat?(1mk)
.....
.....
 - c) Why is mercury preferred over water as a thermometric liquid? (4mks)
.....
.....
.....
 - d) When a Celsius thermometer is inserted in a boiling liquid, the mercury thread rises above the lower fixed point by 19.5cm. find the temperature of the boiling liquid if the fundamental interval is 25cm.(3mks)
 - e) Convert the following units
 - i. 120°C to k. (2mks)

575k to °C. (2mks)

a) Conduction.(1mk)

b) Convection: (111K)

c) Radiation.(1mk)

u) Describe an experiment to show that the rate of reaction increases with temperature.

.....

.....

.....

.....

i. Why did she use a metallic saucepan?(1mk)

.....

.....

iii. Suggest other materials she would have used instead of the paper. (3mks)

iv. Would it be possible to cook using a plastic saucepan?(1mk)

3. What do you understand by a force and give two examples of forces.(2mks).

a) Calculate the weight of a body of mass 10kg which is placed on earth's surface where $g=10\text{m/s}^2$.(2mks).

b) Give the difference between surface tension and capillarity.(2mks)

c) Describe an experiment which you would carry out to show the existence of surface tension.(5mks)

d) Why do you think footballers' shoes are made with spikes on the soles?(1mk)

e) Of what importance are treads on car tyres?(1mk)

f) Why do these treads become thinner with time?(1mk)

END