# END OF YEAR EXAMINATIONS PHYSICS

TIME:  $2\frac{1}{4}$  HOURS

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#### **INSTRUCTIONS**

- Answer all questions in the question paper provided.
- Silent, non-programmable calculators may be used.

#### **QUESTION ONE**

In a certain village a man wanted to sell scrap but has a challenge of using the measuring instrument shown below. He needs an explanation on how to use the instrument to find the mass of the scrap. write down how you can help him solve this problem. (05 mks)

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	2 kg		m kg	
Kown <sup>′</sup>				Mass of
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### By kenneth onderi @ 2023 examinations 0705476300

Hence deduce the mass of the scrap if distance AB is 0.5m and BC is 0.25m	
. (05 marks)	
QUESTION TWO	
In an experiment to investigate the factors that determine the tensile strength of a material, three straight plastic pipes A, B, and C of diameters 1 cm, 2cm and 3cm respectively were used as shown in the illustration below. varying weights were placed in the middle of each of the pipes and it was found that:  • Pipe A got deformed when 50N was placed in its midpoint.  • Pipe B got deformed when 100N was placed in its midpoint.  • Pipe C got deformed when 150N was placed in its midpoint.  • pipe D was the only metallic pipe of diameter 2cm but got deformed when 1000N was placed on its midpoint.	3
a) If you were to select two of the pipes above for hanging clothes whose total weight is 120N, which pipes would be the most suitable for use. Explain the factor you based on to justify your answer (05 marks)	

•	e strength of a material from the
above investigation and briefly explain how	each factor affects it . (05 marks
QUESTION THREE	
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Three engineers were told to design a structure of R and C w	•
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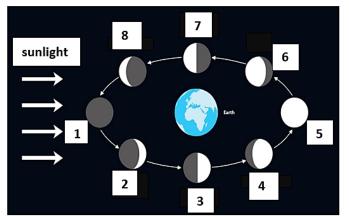
# **QUESTION FOUR**

A newly recruited nurse who has never used a dentist's mirror has difficulties in testing the patients. Since it is her first time at workplace. With the aid of a diagram explain to her how to use it and include the features of the image formed. (05 marks)

QUESTION FIVE  On one vacation you and your friends decided to go out to tour Mabira with all the joy involved in observing the beautiful scenery that n provide, you both forgot how far in the forest you had travelled. On it was now too late because by now both of your phones had run out o left with no other choice you checked inside your travel bag and fou notebook, a map of the forest, a magnetic compass. Do you think yo get out alive? Explain how you will use the above materials to survive the horrors in the dangerous jungle before it is too late to survive.		-															1								İ	t	<u> </u>
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## **QUESTION SIX**

Atleast every person who has normal eyes on earth has seen how beautiful the moon is among the stars in a dark night sky but the question that has puzzled many humans since the dark ages has always been the different shapes that the moon displays on the night sky. The different shapes of the moon as viewed from earth are also known as the **phases** of the moon. Study the different phases of the moon shown in the figure below and use it to answer the questions. (8 marks)



(a)	Name the eight phases of the moo shown in the figure above	7
1.		
2.		
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4.		
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6.		
7.		
8.		

Is it possible to see the new moon? Explain briefly (2 marks)

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# **QUESTION SEVEN**

Kato has a sick **brother** in the hospital. The mother sent him with hot food in the dish to take to the brother. When he reached the hospital, the patient refused to eat the food because it was cold. How will you advise **Kato** and his mother on what to do to make sure the food reaches the hospital when it is still warm. Explain any two possible solutions. (05 marks)

<u> </u>	By kenneth on	deri @ 2023	<u>examinati</u>	ons 070547630	<del>-</del>
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WORKBOOK
AND
ACTIVITIES OF INTEGRATION

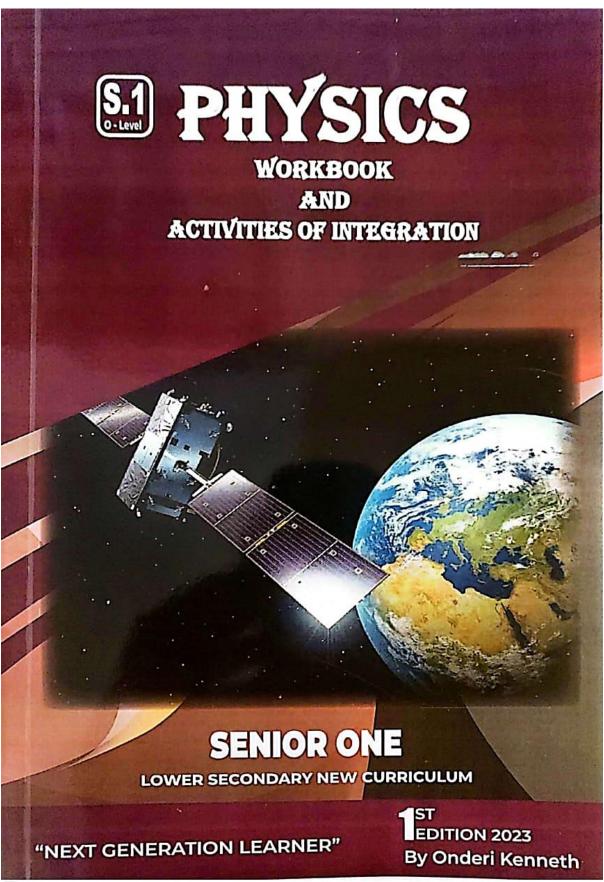


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NEW CURRICULUM 1º Edition 2020

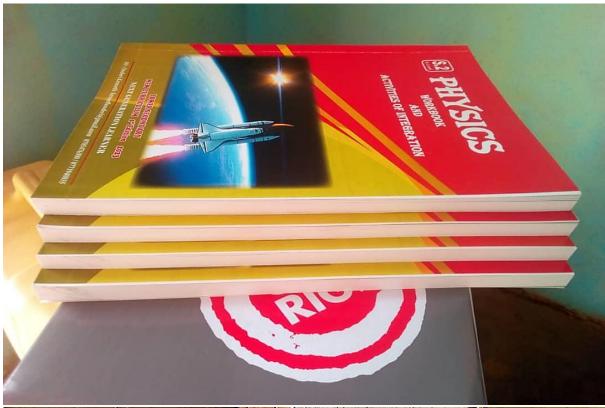
NEXT GENERATION LEARNER

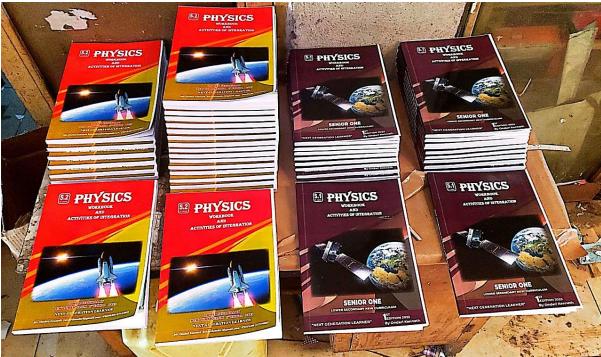
Mr. Onderi Kenneth kennethonderi@gmail.com 0705476300/0771940855

CS Scanned with CamScanner



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Come January 2024 all workbooks (S.1, S.2, S.3 and S.4) will be available with possible solutions provided at a free cost to those who purchase more than 50 books

- Positive criticism is well received to help improve our service delivery to the nation in terms of physics as a subject and how the books should be like in order to make the subject better.
- My sincere apology for delay in production of book three as had earlier been anticipated.
- Get in touch with the author @ 0705476300/ 0771940855.

