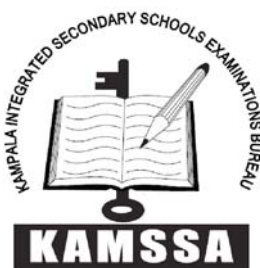


NAME:.....STREAM.....



KAMSSA LOWER SECONDARY EDUCATION EXAMINATIONS

PHYSICS

SENIOR TWO

END OF YEAR 2022

2 Hours 15 Minutes

SECTION A

Instructions: Attempt all questions in this section

SECTION A

Attempt all questions.

1. Naturally, water usually flows from up land sources such as crater lakes in the mountains to sources in low land. NWSC pump water from low lands to storage tanks at upper levels using water pumps. Explain how this is possible and how the consumers are able to collect this water. (5 marks)

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2. You have been selected amongst science learners who are to go on a field trip. The entire group has been given raw food to take a long. You have been tasked to design and make a solar concentrator that will be used for cooking while on the field tour since there is no other source of energy at the destinations of the strip. using the knowledge of reflection of light, what materials are you likely to use.

(5 marks)

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3. There has been an outbreak of malaria in your community and your friend is admitted in hospital.



You have been delivering a warm meal; however, you are required to deliver a hot meal for her in hospital. Without using a food flask, how would you ensure that the food you have prepared remains hot till you reach hospital? (5 marks)

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4. Truck drivers in masaka load their trucks beyond what's required by traffic rules. They are always arrested and charged by the traffic police department.



Briefly explain the dangers of this situation.

(5 marks)

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5) A brick of mass 3.0kg and dimensions 5.0cm x 3.0cm x 2.0cm rests on different sides on the laboratory table. Calculate the

(a) Maximum pressure

(02½ marks)

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b) Minimum pressure

(02½ marks)

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6) (a) State Pascal's principle

(02 mark)

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(b) Identify devices that apply Pascal's law of transmission of pressure in liquids. (03marks)

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7) Given the following materials copper, glass, steel, Sulphur, brass, wood, cork, nickel, Use the above material to complete the table below. (05 marks)

Materials attracted by Bar magnet	Materials not attracted by bar magnet

8) (a) Distinguish between potential energy and kinetic energy. (02marks)

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(b) At a playground, Musa of 25Kg mass climbs up a concrete slide of 2.3m height and slides down the slope. At the end of the slope, which is 0.3m above the ground, his velocity is 1ms^{-1} . What is his change in potential energy. (03marks)

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SECTION B

Attempt only one question

9. Students from KAMSA secondary school intend to visit one of the two tourist locations. The peak of mountain Rwenzori and the shores of Lake Albert in western Uganda.

Task

As a tour guide, write down the guidelines based on knowledge of pressure students should follow to ensure safety while on the tour.

END